

It has been the misfortune of agriculture, that up to a recent period, practical men have had but little intercourse with men of science. They followed husbandry with some success as a practical art, and many have, of late years become sensible of the advantages to be derived from the resources of science. "Could the man of practice, however," says Mr. Stephens in his *Book of the Farm*, "supply the man of science with a series of accurate observations on the leading operations of the farm, the principles of these might be truly evolved; but I conceive the greatest obstacle to the advancement of scientific agriculture to be sought for in the unacquaintance of men of science with practical agriculture. Would the man of science become acquainted with practice, much greater advancement in scientific agriculture might be expected than if the practical man were to become a man of science; because men of science are best capable of conducting scientific researches, and being so qualified could best understand the relations which their investigations bear to practice, and until the relations between principle and practice are well understood, scientific investigation, though important in itself, and interesting in its result, would tend to no practical utility in agriculture. In short, until the facts of husbandry are acquired by men of science, these will in vain endeavor to construct a satisfactory theory of agriculture on the principles of the inductive philosophy." The evil here referred to, is we trust, in the course of being remedied; scientific men are becoming better acquainted with the operations of agriculture, which are not

difficult to learn, while both they and men of practical experience are becoming more alive to the expediency of mutual co-operation, to enable them to satisfy the expectations of the public, whose interests are deeply involved in the case.

The improvement in agriculture has been comparatively of recent date, though its progress has been most satisfactory. It is true the improvement has been greatest in some portions of Europe, and in the older States of this Union, because in those countries there was the greatest need of improvement, yet we are glad to perceive that the newer portions of the country are beginning to share in this improvement, which will finally reap the greatest benefits from it, because while the soil of the older countries has become exhausted, the adoption of an improved, scientific system of agriculture will prevent the exhaustion of the new lands and yield increased reward to those who adopt it.

We have had some experience in the matter of introducing agricultural improvement, and know something of the obstacles in the way; prejudices have to be overcome, inveterate habits abandoned, capital increased, and processes engaged in, which like everything experimental, involved the risk of loss. But while the general body of agriculturists continued indifferent, and in many cases deprecated change and treated it with ridicule, instances of an opposite kind were to be found in different parts of the country, where the means and desire for improvement were happily combined. These exerted with energy and skill, soon led to important results, and showed so clearly what could be done for the improvement of the soil, that even the most incredulous could not fail to be convinced.

The advance of education among the farmers, the dissemination of agricultural information through the medium of the press, and the active agency of agricultural associations, now so generally established throughout the country, have given such an impetus to improvement that we look forward with hope for still more rapid progress in years to come.

The aid of science was felt long before it was given, for it was late in entering the field and slow in realizing the advantages that were expected from it.

Chemistry has already done much in this department, and more would have been realized, but from errors into which its early advocates have fallen, but as practical knowledge has advanced these errors have been corrected, so that

we may now expect that future experience in this comparatively new field of research, will satisfy all reasonable expectations, and justify us in regarding this science as holding the key to many of the operations on which the prosperity of agriculture depends.

Drainage, as practiced in Europe and now so successfully introduced into some portions of our own country has proved so effective that its benefits cannot be over estimated. It forms the basis of all agricultural improvement; for unless the land be properly drained, no mode of treatment, or kind of application can exercise its full influence. If any cause of dispute still attach to the subject it has no reference to its intrinsic merits, but merely to the mode of its execution; and much of that might be spared by the consideration that no one method is fitted for universal adoption, but that the practice must vary in different localities, according to the nature of the ground, the character of the sub-soil and a multitude of other considerations. A uniformity of system, under circumstances so diversified, would amount to a presumption against it. Next to draining, another most important process has been introduced, which has added no little to the progress of husbandry by the increase of crops. We allude to sub soil plowing. This operation may be said to present itself under two phases or modifications, that of simply stirring the soil to a considerable depth, including a stratum more or less deep of the subsoil, but leaving the latter unaltered in its relative position to the surface soil. This is accomplished by the aid of two plows—the subsoil plow following in the furrow of the ordinary plow. The other is by the double or trench plow, by which the subsoil is not only broken up and agitated, but a portion of it is raised upwards and mixed with the surface soil. Both methods secure partial drainage and provide for the more perfect aeration of the soil, and afford greater facilities for the developments of the roots of plants, the more free circulation of warmth, as well as air and the free action of manures, but the last mentioned system, while it does all of this even more effectually than the other, tends besides, to increase the depth of nutritive soil by placing materials from the substratum in such a position that they mingle with and soon acquire the same properties as the upper soil, the whole forming in time a heterogeneous mass, suited to the requirements of the deepest rooted vegetation. In the choice between these two implements regard must be had to the depth of the

soil and the character and condition of the sub-soil.

In no department has the condition of agriculture undergone greater change than in that of manures, especially that class called special manures. Chief among these are guano, bone dust and superphosphate of lime. Of guano the quantity that has been transported from the islands of the sea since its introduction sixteen years ago, to England and the United States, is incredible to those not familiar with the trade and the necessity of its demand. The change that has been wrought by the introduction of these manures in the older States, bordering on the Atlantic, from New York to South Carolina, cannot be realized except by those familiar with it. Lands which were naturally poor, and even those once fertile had become so exhausted that they were abandoned by their former owners, as no longer affording a subsistence for them and their families, have, since the introduction of these manures been more than restored to their original productiveness and the character and condition of the people improved in a corresponding ratio. Another means of improving the soil in some of these States, was practiced long before the introduction of guano and the phosphates, particularly in Pennsylvania, Maryland and Virginia. We allude to the frequent application of lime in connection with the growth of clover. Although its effects are well known and most beneficial, yet its mode of action is even now but partially understood; it appears to be more complicated than is usually supposed.

In the application of science to agriculture we must frequently be content to wait for results which deserve the character of being of great practical importance. An effort has recently been made to see how meteorology may be made to contribute more directly to the cause. The very attempt is a step in advance, and implies the existence of enlightened views as to the true interest of the art. In a department so extensive as this, and embracing phenomena of so complex and subtle a nature, observation may require to be continued for a considerable period before important practical deductions can be made. But it would be a short-sighted policy indeed to allege this as a reason for discontinuing or conducting them with indifference. Their scientific interest and value are unquestionable, when we take into view what they have already done for the material interests of the world, under the direction of a single individual—Lieutenant Maury of

the U. S. Navy. What may we not expect then, for the cause of Agriculture, while he, with the aid of his increased experience and observation together with other men of science who are devoting the energies of their great minds to this important interest.

Some of the processes we have referred to imply the existence of a very superior class of agricultural implements; and it is, indeed, impossible to glance at the progress of husbandry without observing how much it owes to the mechanical skill that has, within a few years past, been exerted in its service. In no department has fertility of invention and dexterity of execution been more prominent than in this. Compare, for a moment, the implements and machines of the present day with the few imperfect tools, constituting the entire set of the farmer, but thirty years ago. The whole could be bought for the value of a single mowing-machine, now considered so indispensable. In the place of the scythe, the reap hook and the cradle, requiring in their use the full powers of the human bone and muscle at the most oppressive season of the year, we now have the harvest machine, propelled by horse power, accomplishing in a more perfect manner in the most hurried season, the labor of half a dozen men. So too, in like manner, is substituted for the hand flail, or the more slovenly practice of "treading out the corn," as in olden times, the horse power and thresher which beats out and cleans in the most perfect manner its hundreds of bushels in a day, and the improvements in machinery for every other branch of husbandry have been equally great. The next great step in the progress of invention and the application of science in this important department of industry is the application of steam to the labors of the farm. Already in England and in some instances in this country, steam has taken the place of horse power in propelling the thresher and grain cleaner, straw cutter, &c., to great advantage, and may we not soon expect to see it harnessed to the plow or rotary digger as a substitute for animal power in the slow and laborious work of breaking up the soil as well as performing other operations upon the farm?

We have thus briefly alluded to some of the improvements which agriculture has undergone within a comparatively recent period, in one of the two great departments—that of rearing crops. The other department which relates to the production and treatment of domestic stock has likewise advanced in some limited lo-

calities to a very considerable extent, yet we regret to state that it has not been so general. The physiology of breeding, in particular, is a subject not so well understood, and one that is practiced in the United States, by but few in a manner calculated to lead to the most beneficial results, yet the improvement that has been attained in England in this department, and introduced in to some portions of this country is still continued with some degree of success.

It appears to us, therefore, of consequence that agriculturists should always keep in view the ultimate connection that exists between the sciences and the art which it is their object to promote. It is of advantage to keep the leading facts before them, and advert occasionally in the midst of their practice to first principles. With these views it is our intention occasionally to draw the attention of our readers to some of these branches of Natural History which have a relation to husbandry, and with this view we shall next consider Geology in its relations to Agriculture.

### PROTECTING GRAIN.

There is an immense loss to the farmers of the West, caused by the exposure of grain in the shock after harvest. No one who does not travel much, can form an idea of the quantity that is then exposed to the weather, many of the shocks having lost their caps by the wind, or being otherwise deranged, so that a large portion of the grain is exposed to every rain that comes, which will finally result in a total loss of a considerable portion of it, and the quality of the remainder will be greatly impaired. We have recently traveled through several hundred miles of the best wheat growing sections of the West, and find thousands of acres of grain thus exposed. While in Buffalo, N. Y., the inquiry was several times made, why is it that so much of the wheat from Kentucky and other Western States, then coming into that market, is sprouted? A number of samples of otherwise beautiful grain, were shown us that were considerably grown. Besides what is lost in the field, that which is shipped to market in this condition, will not bring the full market price, and the loss in the aggregate, to the country the present season, will be many thousands of dollars.

Two years ago the complaint of sprouted wheat was almost universal, and in some sections the evil was so great that many farmers could not procure sufficient sound wheat to sow

The present season has not been so wet but that wheat generally could have been secured in good condition, had proper precautions been taken.

This evil is increasing to a great extent every year, when the season proves a wet one. The old eastern farmers generally secure their grain in much better condition. When not threshed immediately after harvest, it is either put into barns or stacked. The difficulties attending the Western settler, and the small value in former years placed upon the grain crop, have led to many neglectful habits that, from the present price of grain, and its increasing value, should lead to an immediate reform in this respect. When grain is not to be threshed immediately, it should either be stored into barns, or it should be stacked as soon as its condition will warrant its safety. The labor of this is but small, while the saving would be great.

The loss sustained throughout the country in 1855 by wheat exposed to the weather after harvest, was sufficient to pay the cost of thousands of barns that would last for generations. True economy requires an improvement in this respect.

### SELECTING SEED CORN.

As we have said before, seed corn should always be selected in the field. In breeding farm stock, the intelligent, prudent farmer wishes to see the animal and know something of his good qualities before he breeds to him, whether he be horse, bull, sheep or hog. It is equally important that selections of the best seeds be made from which to produce a succeeding crop. Like begets like in the vegetable, as well as in the animal kingdom. Stalks of corn from which seed is to be selected, should possess all the characteristics calculated to produce the greatest crop of the best quality. Many experiments have been made in selecting corn and other seeds, which clearly prove that the product may be increased and improved twenty, fifty and even one hundred per cent, after a series of years, and from neglect in this respect, deterioration has been almost as great.

The labor of selecting the ears of corn in the field sufficient for seed is not great. It can then be secured and preserved so that its vegetating principle shall not be injured, and it is always ready when wanted to plant. We would therefore urge every farmer to select his corn from such stalks as are most perfectly developed, affording the most productive ears.

### United States Agricultural Society— Fair at Louisville.

At the annual meeting of the United States Agricultural Society, held in Washington City in January last, propositions were made from various sections of the Union, for the place of holding the fair of the society the present year. Delegates were present from Kentucky, proposing Louisville, and tendering the use of the grounds and building of the South Western Agricultural and Mechanical association for the purpose. Kentucky being celebrated for its superior stock, and particularly Short Horn cattle, which in point of numbers, and excellence of quality are unequaled in any part of the world. In order to afford an opportunity to the citizens of the country to witness these it was finally determined to locate the fair at Louisville, the citizens guaranteeing funds sufficient to meet all the incidental expenses of the fair.

According to announcement the fair opened on the 31st of August, and continued six days. With crops unparalleled, the rivers in navigable condition, and every other avenue of travel open, and with the most delightful weather, the public had reason to expect the most perfect success. But we are pained to record it a magnificent failure. Taking the exhibition as a whole it hardly equaled a county show, indeed the show of Durhams and other stock was less than we have ever witnessed at any of our local fairs in this section of country. There were but few herds of short horns represented and these generally in small numbers. The cause of the deficiency in this department we will not attempt to explain.

There were some good cattle including Devons from Ohio, Indiana and other States, and a number of head of Herefords, from New York, owned by W. H. Sotham.

**Horses.**—The show of horses as to numbers was better, embracing some of the best animals in the country.

**Sheep.**—There were but few sheep on the ground, but these generally of excellent quality mostly owned in Kentucky, Indiana and Ohio, with some good Merinoes from Michigan.

**Swine.**—We should hardly think there were thirty hogs in the pens, all told. These were good specimens of the different breeds exhibited and were contributed by Kentucky and Ohio.

**Machine Department.**—This branch of the exhibition presented a very meagre display, although there were embraced in it some new machines of the greatest practical utility, some of

which we propose to specify; prominent among these were a number of steam engines; three of these were of the manufacture of Barbaroux & Snowden of Louisville, one a stationary power made for Prof. J. Lawrence Smith, of the Louisville chemical works. This was a machine of great simplicity, embracing several important improvements and a specimen of superior workmanship. Another class of engines was on exhibition, manufactured by the same firm, and also specimens from the Newark (O.) machine works, designed as motive powers for farm purposes. We regard these as among the most useful machines of modern introduction. For the extensive farming operations in the west the ordinary iron cog-gear horse power is the most expensive and laborious power in use. We predict that at no distant day steam will entirely supersede these, as more efficient, less expensive, and applicable, not only to threshing, but grinding all kinds of grain, cutting hay and straw, sawing wood, &c. These engines were employed on the ground in threshing grain and doing other farm work to the admiration of all present.

Munn & Co., of Louisville, exhibited one of Page's patent portable circular saw mills, of their own manufacture in full operation. A large number of these mills have long been in successful operation in almost every section of the country. They cut with great rapidity and give general satisfaction.

We are pleased to notice another machine in this department that has never before been exhibited in this State. It is for manufacturing tile for land draining, an improvement in farming that is destined to add immensely to the products of our country. These machines are manufactured by John Daines, Birmingham, Michigan, of which we shall have more to say in a future number.

Hedges & Free, of Cincinnati, exhibited their sugar mills and evaporating pans for the manufacture of Chinese cane sugar. There were a variety of other machines in this department but we must pass over them for the present.

**Agricultural Implements.**—One tent was devoted to the display of farm implements and machines. In the midst of a country celebrated for the extensive manufacture of articles in this line, and near a city with several large agricultural warehouses, and three or four large manufacturing establishments, devoted exclusively to the fabrication of agricultural implements and machines, the fifth great fair of the United States Agricultural Society presented a

sorry display. We will not attempt to enumerate the articles in this department, nor allude in particular to but a few of them. Among the new machines was one for husking corn.—Recently several kinds have been patented and promise useful results. We did not learn the name of the manufacturer nor patentee. The utility of drilling wheat and other grain over the ordinary method of broad-cast sowing has been made sufficiently manifest within the last two years. Machines for this purpose were shown and we hope that numbers of our enterprising farmers have been induced to buy them. Beyond these there was nothing new or novel.

**Floral Hall.**—This is a new building erected expressly for the occasion and one most admirably arranged for the display of fruits, flowers, specimens of the fine arts, &c., that we have ever seen, but we regretted to see so much unoccupied space. In the centre and upon the inner tables there were a few green house plants and cut flowers. Upon the outside tables were exhibited some of the various fruits of the season, including some good specimens of apples, pears, with but few peaches, &c., in quantity hardly excelling some of the weekly exhibitions in former years of the Kentucky Horticultural Society. Col. Marshall P. Wilder, the worthy President of the U. S. A. Society, exhibited one hundred varieties of pears.—William Heaver, of Cincinnati, thirty varieties, together with grapes and other fruits, to whom was awarded several premiums. Messrs. Sigerson, of St. Louis, were present with quite an extensive variety of apples and other fruits. A collection of several varieties of superior excellence of foreign grapes were exhibited from the garden of N. Durfee, of Fall River, Mass. L. Young, President of the Kentucky Horticultural Society as usual, exhibited a splendid collection of apples, pears and some other fruits. Hobbs & Walker, of Jefferson County, Ky., and W. F. Willey, of Indiana, also contributed collections of excellent specimens of fruits. The show of garden vegetables was too small to require even a passing notice. In the large gallery of the hall upon the outer walls were a few portraits of celebrated horses, specimens of penmanship, &c. Around the centre were some specimens of needlework, soap, candles, tobacco, together with a few other articles, while the entire floor of the gallery was unoccupied except with two specimens of *Howe's Elliptic Spring Bed Bottom*, one applicable to any ordinary bedstead—the other designed expressly for inva-

lids. A great many devices have recently been introduced as a substitute for the old fashioned smothering feather bed, designed to afford ease to the body when at rest. Having used one of these for some time we find it to surpass anything of the kind that we have ever yet seen. The springs and bottoms are so arranged that they yield to every projecting bone and part of the body, giving an easy, uniform bearing to the whole. These are manufactured by Gray & Co., Cleveland, Ohio.

With all the materials to constitute a grand Fair, within our reach, and while the former fairs of this society have been so successful, it may be asked by those at a distance why this has proved a failure? We will answer, simply because the great public good was wholly lost sight of in the one idea of *making money*. Of the many fairs that we have attended in other States the entrance fees were reasonable. For implements, machines, farm products, &c., the fee of annual membership, usually from one to three dollars, entitles the member to the right to exhibit what he pleases. If a dealer or manufacturer of agricultural implements and machines, usually a specimen of every article on hand is entered. If a farmer, gardener, nurseryman or fruit grower, contributions of specimens of every variety of the product of the soil are made to the fair. This holds out encouragement to numerous competitors and contributors who in the aggregate make up a grand show. But according to the rules adopted on this occasion no article could be admitted without paying a specific entrance fee, and, (with the exception of poultry) from \$2.00 to \$50.00. Take for instance the class of articles offered for "*Hotel Premiums*," embracing hams, butter, potatoes, yams, flour and corn meal, which in addition to an entrance fee for each, every competitor is required to forfeit the articles exhibited. Suppose fifty competitors enter for the premiums on hams, of which each are required to enter "*not less than five*," here are two hundred and fifty hams, besides the entrance fee, which are to be given to the hotels by which the premiums are offered, and so of flour, there would be fifty barrels, besides the fees to be sacrificed. Few competitors we think will be found willing to be thus bled to depletion for the humble privilege of contributing to the great national agricultural fair. As well might it be required that each exhibitor should give to the society his fine horses, or his Durham cattle.

Had a liberal scale of entrance fees been

adopted, every department of the exhibition would have been filled to overflowing, while the receipts in the aggregate would have been largely increased. At the last exhibition of the society held at Philadelphia, there were five or six exhibitors of agricultural implements and machines, some from a distance of two or three hundred miles, each of whom added more to the show than all that was embraced in this department on this occasion. From the high reputation which the society had acquired for its success on former occasions, and the extravagant promises made through the papers, the number of persons in attendance upon the grounds during the week has been probably equal to any former occasion here—yet thousands who only visited the grounds but once during the fair would probably have remained and gone every day, had the entrance at the gate not been double that usually charged. We have heard but one opinion expressed by officers, members and visitors—and that of universal dissatisfaction. What will be the effect of this upon the future prosperity of the society will depend much upon circumstances. We hope, however that the next exhibition will be located at such a point, and under such rules and regulations as will insure its future success and prosperity. The whole was concluded by what was termed a grand banquet at the Galt House, in which some two hundred persons participated.

The press was numerously represented by members from abroad, and although there was a general expression of disappointment, yet all seemed to appreciate in the highest degree the attentions shown them by Jno. D. Osborne, Esq., and other members of the committee of reception.

#### **Exhibition of the Kentucky Agricultural and Mechanical Association at Lexington, Kentucky.**

The eighth annual fair of the farmers and mechanics commenced on Tuesday, Sept. 8th. As on former occasions, there was a general display of the leading articles embraced in the premium list. In some departments the show was superior, particularly on the first day, of fruits, garden vegetables and field products. The collection of vegetables, embracing every variety grown in our climate was represented by specimens of superior growth. In cereals we have never seen specimens of better quality. The premium wheat, grown by Samuel Maddox,

of Fayette county, was a new variety brought from Belgium, the whole of which fell into Mr. Maddox's hands. It is remarkably white, of large, plump berry, weighing, just from the straw, 66 pounds to the bushel. The specimen exhibited was from a crop of a thousand bushels; the same has been forwarded to be exhibited at the St. Louis fair. Mr. Maddox also obtained the premium for the best oats; the variety is known as the Scotch Flour oats, and weighs 50 pounds per bushel. Whether Mr. M. is a better farmer, or whether he exercises greater enterprise in procuring choice seed, his example is worthy of imitation by others.

The exhibition of cattle, particularly of cows, was remarkably fine. It was proclaimed from the stand that it was the opinion of strangers present, as well as of the breeders of Kentucky, that the ring of cows, 18 in number, under three years old, has never been equalled in this country. Taking the show of stock as a whole it far surpassed that of the U. S. exhibition at Louisville.

There is an increasing interest in this section in the use of labor-saving implements and machines. A new straw cutter, Cumming's patent, attracted the attention of many of the farmers, and a very large number were sold. There were two steam engines in operation on the ground, designed for farm work, one from the machine works of A. N. Wood, of Eaton, N. Y., the other from the Hydraulic Works, of Barbaroux & Snowden, Louisville, Ky. This establishment is under the superintendence of Mr. A. F. Ward, one of the best practical draftsmen and engineers in the country. Mr. W. has paid special attention to engines for farmers, and has greatly simplified them; and upon the plan adopted has given great strength and durability. Several steam engines are now employed by farmers around Lexington, in threshing, grinding, breaking hemp, cutting hay, straw, &c.

We have not space to notice in detail the various departments of the fair. But while there is evidently an increasing interest manifested in the exhibition of the various articles of domestic manufacture, needle work, fruits, vegetables and farm implements, &c., we think the managers would find it to add greatly to the interest of the fair, and to the pecuniary interests of the association, to erect suitable sheds or buildings for the permanent display of these articles to the end of the fair. If this were the case thousands that now fail to attend at all would manage to come one day at least,

could they then see in their proper places all that is brought for exhibition. From long experience with other fairs we know that the plan would work well and should be generally adopted.

We cannot refrain from tendering our thanks to the President, Secretary and other officers of the association for attentions extended to us during the fair.

From our limited space we are unable to make room for the list of premiums awarded.

### Kentucky State Agricultural Society.

THE "HOWARD PREMIUM."

*For the best Twenty-five acres of Wheat in 1858.*

It is with great pleasure that I invite the attention of the farmers of Kentucky to the following noble letter from Mr. H. B. Howard, manufacturer of Manny's Combined Reaping and Mowing Machines, and dealer in implements and seeds, Louisville, Ky.

His generous offer is gratefully accepted by the Kentucky State Agricultural Society, and at the first meeting of the Directors judges will be appointed and regulations will be adopted, under which the premium will be awarded, as proposed by Mr. Howard.

Notice is given thus early so that farmers in all parts of Kentucky may select their seed, prepare their ground and make the sowing with a view to take the tempting premium, and win the high honor connected with it.

Who will emulate this liberal and patriotic example of Mr. Howard, and like him, increase to a vast amount the productive industry of his country?

ROBERT W. SCOTT,

Cor. Sec. Ky. S. A. S.

Friendly publishers please copy.

LOUISVILLE, Ky., Sept. 4, 1857.

ROBERT W. SCOTT, Esq., *Corresponding Secretary of the Kentucky State Agricultural Society:*

DEAR SIR—Believing that under a more thorough system of cultivation that the wheat crop of this country may be largely increased, and for the encouragement of this object I propose to offer, through the Kentucky State Agricultural Society, as the "*Howard Premium*," one of Manny's Combined Reaping and Mowing Machines, with Wood's improvement (it being the machine to which was awarded the Grand Gold Medal of the United States Agricultural Society at the late trial at Syracuse, New York,) to any farmer in Kentucky who shall grow the largest and best twenty-five acres of wheat, to be sown the present fall, subject to such regulations as the officers of said Society may adopt. With the same object I also propose to offer a like

premium through the Indiana State Agricultural Society.

Very Respectfully,  
H. B. HOWARD.

### STORING POTATOES FOR WINTER.

In no former season has so large a crop of potatoes been grown in the West, nor have they ever been of better size and finer quality. When potatoes mature late in the season, and the weather is dry, they retain their good mealy qualities much longer than when they mature early, and the summer afterwards proves wet. When these are dug and put away for winter, after the manner practiced by many, they are injured by heat, germinated in the pile, and they sprout and become watery and of inferior quality. The most perfect method of keeping potatoes in winter, is in a dry house above the freezing temperature. In our August number for 1856, we gave the plan of a potato house calculated to preserve the crop in the most perfect order, and with much less labor than is required to bury them in the ordinary way, and in this house they are accessible at all times when the weather will admit of their removal.

When potatoes are to be put away in pits, care should be taken to keep them as dry as possible, and to ventilate the pile so that no confined air shall remain. The best method is to select a high, dry ridge, and, when the pile is formed give it a thick covering of straw, grass, or stalks, with a sufficient thickness of earth to render them secure from frost, and then cover the whole with plank so as to turn off the water into trenches, which should surround the heaps. In forming the pile, a tube, or several of them, according to the length of the pit, should be extended into the body of the heap and reach to the top of the earth, for the escape of heated air. These may be five or six inches square, and, in very cold weather, the opening should be closed with a bundle of straw or hay. Without this precaution, potatoes that are designed for seed, are as much injured as if they were intended for the table. Before planting time they are so much grown that their strength and vigor are so exhausted that the second growth is much weaker than the first, causing slender, sickly vines and a greatly diminished crop.

Except the covering of plank, turnips and other roots should be stored and ventilated in the same manner.

Farmers should always drive their work and not be driven by it.

(Written for the Valley Farmer.)

### Educational Agriculture.—No. 1.

BY HOPE VERRET.

There has never been any lack of Agricultural metaphors applied to education, but they have usually been those appropriate to the later stages of its development. The field of the human mind has always had its harvesters and its sowers in plenty, but fewer tillers of the soil.

As I propose in a series of brief articles—two or three, or more, just as upon reflection the subject may unfold itself and exhibit phases not yet fully scanned—to treat of education, following agricultural analogies, I shall dwell longest and most attentively upon those points which have been least discussed in this connection.

1st. The preparation of the soil. This presupposes an accurate analysis, and thorough comprehension of its natural and unimproved state.

It has been said and cannot be too often repeated, that the educator must study the capacities and dispositions of the pupils in his charge. Hitherto this has been done either for the purpose of ascertaining the particular sphere of activity to which they may be adapted, in order that their mental energies may all be exerted in that direction, or with exclusive reference to the moral training, the importance of which cannot indeed be overrated; yet the educator should study the mental and moral constitution for more important ends than even these, for the sake of *supplying deficiencies* when he has learned what is wanted. He should strive not merely to "form the common mind," but to make *every mind fit for formation*—capable of bearing fruit worthy of cultivation.

The good husbandman does not resign his fields to briars and thistles, even though he may have discovered that these are their native products. By no means! When he has acquainted himself with their natural defects he at once applies himself diligently to correcting them, and preparing a soil fitted for something useful. Agricultural chemistry has taught him how to do this. How thoroughly and efficiently its principles have been developed, and practical rules deduced thence, those who read this journal need not be told, and how successful has been their application, those who have followed its precepts are capable of judging.—Why should the metaphysician, who is the mental chemist, be so far behind the analyzer of the organic and inorganic elements? Theoretical-ly he is not, but learned disquisitions on "men-

tal states" must have some infusion of the practical element before they can become rules of action. Yet who will venture to say that the patient and persevering seeker would not find many valuable—we might safely call them *new truths*, beneath the mountains of rubbish which time, human ingenuity and the languages of Babel have succeeded in heaping up. At all events we will take courage and seek, with the help of the great thinkers of the past and the present, to obtain a few plain common sense rules in Educational Agriculture. Such an investigation must however be reserved for another article.

[Written for the Valley Farmer.]

### BURYING POTATOES.

MR. EDITOR:—Having a little spare time I thought I would write to the farmers. I will give them my plan of burying potatoes through the winter so they will keep without freezing. My plan is this: I take rye or other straw and look out for a dry place to bury the potatoes. Spread the straw thick on the ground, so that when the potatoes are put on the straw it will be three or four inches thick or more. The more the better so it is dry under them. Put the potatoes on the straw till you get in as many as you want to bury, if it is 80 bushels. Now put your straw around the potatoes. Don't be afraid you will get too much straw on the potatoes. I put 20 bunches of rye straw under each heap and around them and it is not too much. The potatoes want about six inches of straw and about the same of dirt and they will not freeze, as I know by experience.

I wish to know whether you have on hand any of the *Farmers* of last year, and if so let me know through the Farmer, and also the cost of them. Please inform me also the best book store, or where I can buy the best agricultural works on different subjects, viz: on the horse, hog, sheep, cattle, &c.

A NEW SUBSCRIBER.

Wyandott, Linn Co., Mo.

REMARKS.—We have on hand ten numbers of the Valley Farmer for last year ('56,) being all the numbers for that year except the February and March numbers. We will mail these to any of our subscribers for fifty cents. J. M. Crawford, of St. Louis, next door to the Valley Farmer office, keeps most of the agricultural works that have been published.

Rancid butter may be rendered sweet by churning it in new milk. It will remain sweet, however, but a few days.

### Hungarian Grass or the Hay Crop of the Great West.

EDS. VALLEY FARMER:—Last spring I wrote an article for the *Iowa Farmer* concerning this new production of the West. This article, together with the comments and endorsement of the Farmer, was republished in the N. Y. Tribune and several other papers. The statements there made in regard to the valuable qualities of this production as a hay crop, attracted so much attention, that letters of inquiry poured in upon me from all parts of the Union, asking additional information, and making application for some of the seed.

It is the design of this article to gratify the spirit of inquiry as far as possible, and aid in the introduction of an article which must become one of our staple productions. We have now had the experience of another season on a large scale, and we can now speak with confidence; there can be no longer a doubt about its superiority as a hay crop over everything ever tried upon the western prairies.

In the spring of 1853, as nearly as I can ascertain, a Mr. Gleason brought a small quantity of this grass seed with him from Illinois. He had procured a handful of it the spring before from a Hungarian exile who was passing thro' the country. What became of the exile or the balance of his seed, I cannot learn, nor yet the name of one who has conferred such a favor upon the people of the great west. His name should be written in letters of gold; for that little handful of seed is destined to change the agricultural character of a dozen States, and give us a product which will stand second only to the corn crop upon the rich prairies of the advancing west. This poor exile, and Mr. Gleason with his handful of seed have done more to promote the agricultural interests of these prairie states than the government has, with all its seeds in the last ten years. They have done so, because they have given us an article completely adapted to our soil and climate, and one which we needed above all others. This may sound like enthusiasm, but it is a sober reality. We have now in this region, the best hay country that I ever saw—until this season and the last it was the worst. The common grasses are a total failure, yet we have hay of the best quality in such overflowing abundance, that we can feed seven months and still have hay to sell, and this hay was grown upon the high, dry prairies at the rate of three and four tons to the acre.

Mr. Gleason sowed his handful of seed in Illinois, and the next season brought the product to Monroe Co., Iowa, where he sowed again. It may be well to observe that he had difficulty in procuring a piece of ground, as farmers were afraid it might somehow ruin their land. The next season which was 1854, he distributed among such of his neighbors as had overcome their fears. This year it began to attract some attention in the vicinity, and its popularity has increased as fast as the little handful of seed has multiplied itself. Those who have seen it every year since the first was sown are now better pleased with it than ever

—this year's crop exceeding all that went before it. Within the little circle of its present production, its popularity is unbounded.

In my article last spring it was stated that a Mr. Bates was the first to introduce it, but a closer investigation traces it beyond him to Mr. Gleason.

I have thought best to secure these facts while they were within reach, because a great effect is destined to flow from this small beginning, and when the little stream becomes a great river, the world will wish to know in what secluded fastness the head spring is situated.

*This grass is a Crop which has never failed.* Wet or dry—cold or hot—it has been a good heavy crop; even last season, when that sturdy giant of the west, the corn, dropped his strong arms, and rolled up his green banners in the dry hot blasts, his more humble neighbor, the Hungarian grass, spread its rich green mantle over the parched soil, and shot up its luxuriant blades, and waved its golden heads triumphantly, in spite of dry winds and rainless skies. In point of certainty we have no crop which compares to it; it seems to be exactly adapted to our loose, deep prairie soils, and is, perhaps, a better crop in Iowa than in its native soil in the country of the Magyars. The secret of its success lies in its strong vitality, stout roots, and adaptation to a dry soil. The roots of our common domestic grasses are too short and slender to reach below the influence of our dry hot summers, while this production, from its greater vigor and larger roots, can pierce below the reach of drought, and draw up the treasures of fertility which lie beneath.

The only objection which can be urged against it, as a hay crop, is that it must be put in every year; but the immense yield, certainty and nutritive qualities more than compensate for this disadvantage; it is not at all likely that we will soon find a perennial grass which will at all compare with it in these particulars.

In appearance the Hungarian Grass resembles Millet, and it no doubt belongs to the same family; but it is much more productive; it affords a better provender and the seed is more oily and nutritious.

As hay it is superior to Timothy, that old and substantial favorite of every farmer. Horses changed from Timothy and Corn to Hungarian grass, begin to thrive on half the usual allowance of corn, and put on that fine glossy coat so much admired by stock growers.

It is not the hay alone which gives value to this crop; it produces seed at the rate of twenty to thirty bushels to the acre, which in nutritive qualities is much superior to oats; it is heavier and contains a large amount of oil. In truth the crop is better than a crop of Oats and Timothy put together.

The production of this crop is as yet mainly limited to the East half of Monroe county and the vicinity, in which it is supplanting both Oats and Timothy, and is reducing the quantity of corn. Farmers are beginning to turn their attention more to cattle than hogs. Up to this time the country has taken up all the

seed, "and cried for more," but this season there will be enough to supply the home market and leave a surplus to send abroad—at what price is not yet settled. Farmers here would not be tempted to part with their own supply for ten dollars a bushel.

As an evidence of the popularity of this crop it may be mentioned that the price of seed has steadily advanced for the last three years, notwithstanding a bushel will sow three acres, and produce 25 bushels to the acre.

In the spring of 1855 it could not be sold at any price, except by the quart or gallon; next season the price was \$2 50, and last season it started at the same, but soon reached \$3.00, then \$4.00 and next \$5.00 with the supply exhausted, although there was no demand for it outside the circle of its growth.

Last spring a gentleman took a small load of it some 85 miles north for speculation, but he could not sell it for what it cost him at home; he then made an effort to put it out on the shares, taking one half the seed for his share, in which he succeeded. He has been offered two thousand dollars for his interest in the crop but refused to take it. All will be taken near where it grew at almost any price.

Another farmer last season who had five acres threshed out 150 bushels of seed, which he sold at four dollars a bushel, making \$600.

#### CULTIVATION.

This crop should be sown from the middle to the last of May, on clean ground, plowed, then harrowed before and after sowing, and then rolled if practicable.

The usual quantity of seed is a bushel to three acres; but where the seed is the main object it may be thinner, and for hay only—thicker.

Any ground fit for oats or corn will answer for this crop—but the cleaner the ground the better.

The rule is to cut it when most of the stalks and blades turn yellow, and the mass of seed is nearly perfect. This secures both hay and seed.

Cut, cure and put up like Timothy; or it may be cradled and put into the sheaves if desired. It comes in just after oats harvest.

When cut the stubble does not die as a general thing, especially if cut as early as it will bear, but it sends up new shoots, which will make half a crop, or it may be used as fall pasture.

I stated that it produced from three to four tons to the acre. This may be put down as the general rule; but some crops will much exceed the highest figure. An acre grown on the farm of Mr. J. Hedrick near Dalahnege, was weighed a few days since, by three of his neighbors, as it was put into the stack, for the purpose of trying to secure a premium at the county fair. The reported weight is *seven tons, two hundred and ten pounds*. This almost staggers belief, but there is little doubt of its correctness.

WM. M. ALLISON.

Eddyville, Iowa, Sept. 10, 1857.

REMARKS.—We insert the communication of Mr. Allison, but must beg leave to give it a

friendly criticism. The Hungarian Grass, as he terms it, has been grown for many years in various parts of the United States on a small scale, and is known by the name of the Hungarian Millet, or the German Millet. It is strictly a species of Millet, and not a grass. We have no doubt it will prove a very valuable forage crop to the farmers of the West. The deep, rich soils of the prairies seem to be peculiarly adapted to it, and we have no doubt that most astonishing crops will be produced.

The Hon. Charles L. Flint, of Massachusetts, in his admirable treatise on the grasses, thus speaks of it:

"HUNGARIAN MILLET, MOHA DE HONGRIE (*panicum germanicum*) has been cultivated to some extent in this State, from seed received through the Patent Office. It is an annual forage plant introduced into France in 1815, where its cultivation has become considerably extended. It germinates readily, withstands the drouth remarkably, remaining green even when other vegetation is parched up, and if its development is arrested by dry weather, the least rain will restore it to vigor. It has numerous succulent leaves which furnish an abundance of green fodder, very much relished by all kinds of stock.

It flourishes in somewhat light and dry soils, though it attains its greatest luxuriance in soils of medium consistency and well manured. It may be sown broadcast and cultivated precisely like other varieties of millet. This millet is thought to contain a somewhat higher percentage of nutriment than the common millet, though I am not aware that it has been analyzed. A practical farmer of Worcester county says of it: 'I have raised the "Moha de Hongrie," on a small scale only. In my garden it has grown thick and fine. As it is a leafy plant and remains green until its seeds mature, I think it may prove valuable for fodder, both green and dry.'

#### One Hundred Tons of Grass to the Acre.

A statement appeared in the Scientific American a short time since, taken from an English paper, setting forth that one hundred tons of grass had been grown in one season from a single acre, on land belonging to the estate of Lord Derby. Some writers took it for granted that there must be a mistake in the figures, we thought so at the time, but in reply, Mr. Jos. R. Nichols, of Haverhill, Mass., who traveled in England last summer and visited this estate, is inclined to believe there is no mistake in the matter. He says, "My visit was made about the first of June, and they had already secured two heavy crops of grass, and it is not improbable that four or five more were cut during the long and favorable season of last year. Four or five crops of the heavy, stout Italian rye

grass is not unusual; and Mr. Meehi, of the celebrated Triptree Farm, informed me that he had once grown seven crops during the summer." This grass grows with great rapidity and luxuriance under the system of irrigation adopted on many of the large estates of England, and particularly by Mr. Meehi, of applying liquid manures through pipes embedded in the soil.

The American farmers can hardly form a remote idea of the benefits that are yet to result from science applied to farming. Land draining, trench plowing, irrigation, liquid manuring are agencies yet to be employed to swell the products of our leading crops to an extent now almost exceeding belief.

(For the Valley Farmer.)

### KEEP A CASH BOOK.

It is a very easy matter and a simple affair to keep a cash book, and yet how few farmers do it. Any person who can write can keep a book of this description, and many advantages accrue from it. We speak now from experience, for we have kept one for more than forty years; besides, it is some satisfaction to know where one's money goes.

On the left hand page of your cash book put down everything sold and the amount received for it. On the right hand side put down all outgoings or expenditures; and when it is begun, if the amount of cash on hand is put at the top of the column of receipts, at any time by adding up the two pages or columns and taking the difference between them, it will show the balance of cash you should have on hand; and if there is any disagreement, there must be some error of entry, or there must be "a hole in the purse." A book of this kind would show at the end of the year, or any other time, the amount of all kinds of grain, potatoes, butter, poultry, eggs, or any other articles sold, and the amount received for them. It would do more—it would show all your outlays for stock, seeds, implements of husbandry, repairs, tea, coffee, sugar, salt, etc., and also for wages, and would present a very curious and interesting document for family investigation at the end of twelve months; and if there should be found a "hole in the purse," it would indicate the spot where repairs were most necessary.

A farmer keeping a book of entries of this description, would always know his latitude and longitude, as the commander of a ship does when on the ocean, and he would be less likely

to run on the shoals or get among the breakers. As it is not very usual among farmers to take receipts when money is paid on ordinary occasions and not in very large sums, and as the memories of many people are very frail, such a book of entries would be of essential service as a record of payment when no other evidence of it existed, and might prevent litigation and trouble in case of the decease of one or both of the parties. On the death of the head of a family who has kept no regular record of his receipts and payments, much difficulty and sometimes heavy losses have occurred, besides a great deal of trouble and anxiety to those who were obliged to grope in the dark in settling his estate.

It is well known that very many intelligent and worthy farmers are careful to preserve an accurate account of all their worldly concerns, duly arranged in proper form, and such rarely find "a hole in the purse." But there are many others who would at once plead guilty, or if they did not, could readily be convicted on responsible testimony of having totally neglected to keep any intelligible series of entries in a book, of their incomings and outgoings, and those are the persons who often complain of "a hole in the purse," and yet they are not careful to have it repaired in season. Our advice therefore is, to keep a cash book.

C. N. BEMENT.

(For the Valley Farmer.)

### Hot Beds to Start Tobacco Plants--Inundated Meadows.

EDITORS OF THE VALLEY FARMER:—I take the liberty as one of your subscribers to submit a question or two to you, myself being a new hand at farming.

I suppose you are aware that for several years there has been a deficiency of early tobacco plants by being killed by late frosts. I therefore should like to know if a hot bed, of the common size of tobacco plant beds, say 30 feet square, could not be constructed at moderate expenses, (and how much?) so as to insure at least for a part of the crop an early supply of good plants.

The bottom lands on the Cumberland river are subjected to inundations. I therefore would like to know what kind of grass for the purpose of making hay for the New Orleans market does receive the least injury by being inundated from one to three weeks, during December, till March or April, or even May, and which would be the best time for sowing under such circumstances.

If you or some of your correspondents who have labored under similar difficulties would publish their experience, I think it would be to

the advantage of some of the readers of your valuable paper.

S.  
Empire Iron Works, Ky., June 20, 1857.

Our correspondent's letter came to hand during our absence, or it would have been answered at an earlier date. In reply to his first question we will state, hot beds made in the ordinary manner answer well to bring forward and protect tobacco plants. We have raised tobacco for several years and always grow the plants under glass. The method for constructing hot beds for garden vegetables was given in one of our early numbers for the present year which will answer as well for tobacco.—The seed need not be planted quite so early as when the plants are to be grown in the open air. We think it would be to the interest of every tobacco grower to raise at least a part of his plants in a hot bed, in order to insure a partial supply in case of severe frost. Glass frames for this purpose are not absolutely necessary; frames covered with jeans or common cotton cloth, covered with a coat of linseed oil, will answer every purpose.

In answer to the second question it may be remarked that irrigation or a flooding of grass lands for four or six days is attended with the most beneficial results, often increasing the weight of grass two fold, but when the flooding is to be continued for ten days or two weeks, particularly as late as May, it might cause the roots of clover and timothy to rot. Red Top, by some called Herds grass will flourish on wet land, and might be benefitted by an overflow of two weeks. We would therefore recommend that variety for such situations. How long a timothy meadow will remain under water uninjured our experience does not enable us to speak with certainty. We shall be pleased to hear from any of our friends who can give us information on the subject.—Eps. V. F.

E. A. S., of Bacon Creek, Ky., asks: What is the method of seeding blue grass pastures and what amount of seed is required per acre? In the early numbers of our volume for last year as well as the present, we gave full information under this head. We will however repeat in substance the same instruction in time for the next sowing. Early spring is the proper season for sowing, and ten to sixteen pounds of cleaned seed to the acre is the quantity usually sown.

We are unable to give the information required in the second query of our correspondent.

[For the Valley Farmer.]

### Hints about the acquisition of a knowledge of Agriculture.

Every farmer as he travels through the country will observe that some fields of corn or other crops look well while others but a short distance off are worthless. This may be caused by difference of soil, but in many causes it will be owing to different management. Even where it is owing to a difference of soil, much useful knowledge may be gained by observing what kinds of soil produce the best crops and what the poorest. Some soils which produce poor crops of one kind, will be found more favorable for some other crop than a richer one would be. Thus soils which produce poor crops of corn or wheat, will often be found best for oats, and some kinds of fruit trees, especially peach and cherry. A thorough knowledge of the adaptation of different soils to different crops, cannot fail to benefit any farmer, but more particularly such as have yet to buy their land. In cases where variations in quantity and quality of crops cannot be attributed to difference of soils, an inquiry as to the treatment they have received, and the crops by which they have been preceded, cannot fail to result in an increase of practical knowledge. Much may also be learned by reading agricultural papers and books, but as no editor or author can be considered infallible, it is best to verify their statements by observation and inquiry or by experiments on a small scale, where there is any doubt of their truth, before adopting them in all cases as rules for action. My object in writing this is not to recommend any particular publications. I am not acquainted with all that are issued in this country, but there are many good ones. A word to the wise is sufficient. H.

FARMERS should rejoice at the glorious achievements which men of skill and science are making for their benefit. In what a deplorable condition would they be, if the improvements which have been made for their benefit within the last half century, were taken away. What could they do? But notwithstanding much has been done, the next half century will witness far greater improvements. Never has there been so many ingenious men laboring to bring out valuable inventions as now, and the efforts of many of them will be crowned with success. And while others labor for the benefit of the farmer let him not neglect to labor for his own improvement.

## Stock Raising Department.

### STABLES FOR HORSES.

Now that the winter season is approaching, when horses must be confined in the stable, a few words to our readers on the subject of their proper care may not be amiss. In his natural state the horse roams free—but he is confined by man so closely that he can hardly lie down. His stall is too frequently not more than four feet wide and it should never be less than six feet. He cannot lie down and rest well in a less space, and if more room were given him it would be better. He is generally compelled to stand on plank, when his proper and natural place is on earth, not in mud and filth, but on dry solid earth. Most stalls are so constructed that the plank upon which he stands slopes considerably backwards, which compels the horse to stand in an unnatural position. The floor or earth should be level, or if sloping at all, let it be towards the manger. The chief reason of there being so many lame horses is, that they are confined in such abominable stalls. The horse likes company—being a gregarious animal, but the partitions between the stalls are generally made so high that he cannot see his companions.

Stables are generally too tight, and too low and contracted. There is not chance enough for the escape of the foul air which arises.—The hay upon which the horse is to be kept is almost universally placed immediately over where the horses stand, thus preventing the escape of the ammonia, or absorbing it, and thus fed in its polluted condition to the horse. No one who has entered a stable in summer has failed to experience the pungent odor of ammonia, which in fact is almost insupportable, yet the poor horse must be confined in this air day after day. Can we wonder that he does not thrive, that he is frequently attacked by sickness, that he becomes blind and is liable under such treatment to all the ills to which horse flesh is heir? By all means see to it that your stables are well ventilated, and that no hay is put over your horses to receive the ammonia arising from your stalls. See that your stables are well lighted. Many a horse has been made blind by being kept in a dark stable. When taken suddenly into the light his eyes are injured and finally frequently ruined. We shall have much more to say for the benefit of this noble animal in future numbers.

### NOTES BY THE WAY.

MESSENGERS. EDITORS:—I see much in my New England travels that I would like to speak of to your readers. There is life astir in all these valleys. There is beauty on all the hills. The season is a wet one and very productive, so that greenness and freshness make lovely every landscape. But just now I wish to speak of the stock of this country. As yet I have not seen a mean, poor, scrawny ox, cow or hog. They are all fat, sleek, and generally large. There has been a wonderful improvement in the stock of this country in the last ten years. And it has been almost wholly effected by good keeping and care in breeding from the best animals of their kind. In the parts in which I have traveled I have seen but little foreign blood. I think I have not seen a speckled or parti-colored ox or cow in New England. I have met with one roan bull of the Durham breed. The farmers here like handsome cattle; so they choose their color. Dark red or chestnut is the prevailing color. Sometimes brown, verging near to black will be found. The general build of the stock here is compact, close and hardy. It looks thrifty and active. One seldom sees a sleepy, dull looking animal. There is something bright and animating in the countenances of all the cattle I have met. They seem to be alive with the stir of the times and to partake of the intelligence of the age. I speak not of horses, for New England has not improved her horses so much as her cattle. What I have seen has convinced me more than ever that good keeping, good shelter, (for all stock is well housed here) and intelligent care in breeding, will be sure in the end to make good stock.—This is emphatically a stock country. Stock is the main reliance of the farmer for money. Hence the farms here are continually improving. All the hay and grain raised is consumed on the farm, and converted into manure.—Let the Western farmer take heed in season.

### Bourbon County, Ky., Durham Cattle Sale Association.

An association composed of a considerable number of some of the best breeders of Short-horns in Bourbon county, Kentucky, has been formed under the above title, for the sale annually, or semi-annually, of thorough-bred Durham cattle. Their first sale took place on Monday, the 21st day of September, on the fair grounds, near Paris. The next sale will take place on the first Wednesday in June, 1858.

This we consider one of the most important organizations of the kind that has ever been formed in the State. It is well known that grade animals are frequently purchased by dealers and sold in other sections of the country for thorough bred short horns, thereby bringing in to disrepute the noblest breed of cattle that has ever been produced, besides doing the greatest injustice to importers and breeders. Under the rules of this association the members are restricted from disposing of any of their stock by private sale, but all must be entered upon the catalogue for public sale, subject to such rules and regulations as will not only secure an equal advantage to every individual breeder and member, but secures to the purchasers none but thorough bred animals, guaranteed to be breeders, (if above three years old) up to the time of sale. Sales are to be without reserve, to the highest bidder—by-bidding being expressly prohibited.

This organization secures great advantages to those who wish to purchase thorough-bred Durhams. All the stock for sale by its members are to be on the ground together, where purchasers may see and compare the merits of every animal and their value to be determined by the bid of the purchasers.

Paris is already known as the greatest stock market in the world, and this arrangement is calculated to add still more to its celebrity and do much to sustain the character and value of this noble breed of animals.

The following are the officers of the Association: George M. Bedford, *President*; Henry Clay, Jr., and Wm. R. Duncan, *Vice Presidents*. R. H. Lindsay and James Hall, *Secretaries*.

#### Competition among Breeders of Short Horns in Kentucky.—A Noble Example.

Mr. R. Aitcheson Alexander is widely known throughout this country as one of the most extensive importers and breeders of Short Horn cattle in the United States. He has spared neither pains nor money to secure the best animals from England, and such has been the extent of his importations that our best breeders have stood rather an unequal chance at the annual fairs where his stock has been exhibited, a considerable portion of the premiums offered of late having been obtained by Mr. Alexander. This has rather had the tendency to diminish the number of exhibitors and deprive the exhibition of some of the interest it would

otherwise afford to visitors. Mr. Alexander has determined, after the fair of the United States Agricultural Society to withdraw all his imported animals from competition at subsequent fairs, and exhibit none but young animals bred by himself. This will put all the breeders upon an equal footing, and increase the number of exhibitors, add largely to the interest of the fairs and promote the strength and stability of the associations where Mr. A. is a competitor.

We regard this determination on the part of Mr. Alexander as highly commendable, and which we have no doubt will be duly appreciated by his friends and neighbors.

(For the Valley Farmer.)

#### COLIC IN HORSES.

MESSENGERS. EDITORS:—As there have been two or three recipes published in your journal for the cure of the above disease, I beg leave to communicate one, hoping that it may prove useful to as many as may have need to try it. I have tried it frequently and have never known it to fail, but have known it to cure when all other remedies failed to produce any effect.

There are two kinds of colic, one known as spasmodic or cramp colic, the other is termed the gravel colic. The former is fully described by Mr. Peacock in the July No. of the present volume, page 211. The latter is somewhat different in symptoms and requires different treatment. In the first place the horse does not cramp, but lies more on his back, bringing the region of the kidney in contact with the ground; he bites his sides and stretches himself frequently. Any person by a little observation can easily distinguish between the two a marked difference, so as not to mistake one for the other.

For the Cramp Colic, take 2 oz. of aloes, 1 oz. of gamboge and 30 drops of croton oil, divide into three doses with a pint of warm water to each; or if the animal is hard to drench, make it into three pills by using linseed oil and flour. Give the two first doses an hour apart; if this does not produce the desired effect, in two hours thereafter give the third dose in a pint of linseed oil, which will be sufficient to remove the most obstinate case.

For the Gravel Colic, take 1 oz. gum turpentine, 1 oz. of ether with 1 pint of warm water; if that does not stop it in two hours, give 1-2 oz. of ether with a pint of linseed oil.

Wm. Good.

Pleasant Vale, Ill.

### SHEEP RAISING.

In France and England Sheep are much more extensively raised than in the United States. In France, the chief object is the wool; in England, the mutton is regarded as the primary object. This being the fact, important improvements have been made in the English breed of sheep for the carcass. Robert Bakewell, after a long series of experiments, produced a breed known as Leicesters, that would mature in one-third of the time that the old breeds would. John Ellman improved a race suited to the chalk hills which surround the south of the Island. These hills are called Downs, upon which is grown a peculiar sweet, soft grass. These sheep are now known among us as South-Downs. Another race has been greatly improved, and are peculiarly adapted to the more cold, mountainous regions of North Britain, called Cheviots.

The Leicester sheep, with proper attention, will attain maturity of size in one year, with an average weight of one hundred pounds of mutton. The South Downs, which are confined to the shorter grass of the calcareous hills, will only arrive at an average weight of eighty pounds of meat in a year and a half. The Cheviots, in the colder regions of England and Scotland require two years to bring them to maturity.

There are thousands of acres of land in Virginia, Kentucky, Missouri and other States, of but little value for other purposes, that are admirably adapted to sheep raising, while there are tens of thousands of acres of prairie land unoccupied, that may be turned to advantage the same way. It is true that dogs and prairie wolves are sometimes troublesome to the farmer, but with a little care, sheep may be protected from wolves, and we hope the time will come when the Legislatures of the States will pass such laws in regard to worthless dogs as will remove all objections in this respect.

Beef is becoming an important item in this country, and with due care in the management of sheep, a more healthy substitute could be produced. For the week ending August 16, of the present year, there were sold in the New York city market, 4,332 beeves, besides nearly four times that number of veals, lambs and swine. For the week ending Aug. 20, the sale of beeves hardly reached so high a figure, but the consumption of smaller animals raise the aggregate number nearly equal to the previous week. With the exception of 240 head which New York

furnished, the entire number are reported to have been supplied by Ohio, Indiana, Illinois, Kentucky and Texas. These were sold to the butchers at an average of 12 1-2 cents per lb. for the meat, and some were sold as high as 13 1-2 and 14 cents. Taking the data afforded by the New York Market, what must be the weekly consumption of beef in the United States? And at such prices how are the laboring classes to be sustained. Fifteen years ago, a common laborer in some of the cities in the West would earn \$1 a day, and beef could be bought for 2 1-2 to 3 1-2 cents per lb. Now he may earn, perhaps \$1.50 a day, while he must pay 12 cents per lb. for his beef. To rear beef cattle to maturity requires three years and upwards, while sheep may be made ready for the shambles in one-third of the time.

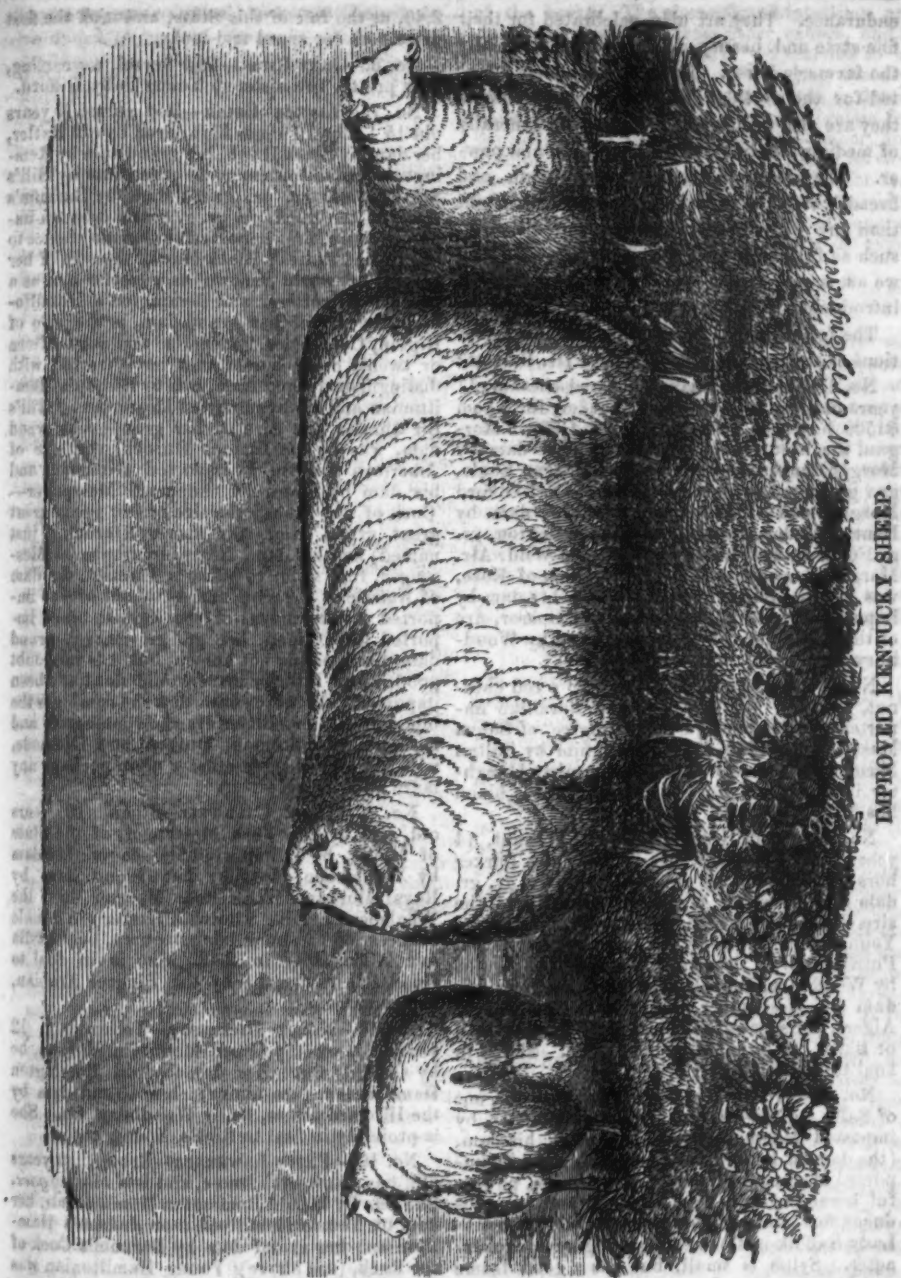
An immense quantity of wool is now required by our American manufacturers. This wool should be supplied by our own farmers. A class of sheep that will afford a good carcass of mutton, and at the same time a good fleece of a moderate degree of fineness, would render the business a profitable one, carried on to any extent under proper arrangements.

In order to extend still further encouragement to this branch of husbandry, we think it due from the American congress to extend every encouragement possible by a protective tariff upon such a grade of wool.

It will be found that different breeds of sheep will be better for some localities than others. Any one acquainted with the origin and character of the different breeds of sheep and the country in which they were produced, can readily judge which will suit his particular region of country.

A breed known as the "Kentucky Sheep," produced by a series of judicious crosses, by Robert W. Scott, of Kentucky, seem to possess all the characteristics of a most hardy and valuable race, combining mutton of superior value, with a fleece of great length and weight, and of fair quality of fineness. We have been familiar with these sheep for several years, and from our own observations their character seems to be firmly stamped and admirably adapted to this region of country. In a former number of the *Valley Farmer* we gave some account of the origin of this breed, and their value for both mutton and wool.

On the opposite page we present our readers with a cut representing the "Kentucky Sheep" in full fleece, accurately drawn from specimens of his flock.



IMPROVED KENTUCKY SHEEP.

#### Morgan Horses in Missouri.

We are gratified to learn that Dr. Richard F. Barret, of St. Louis Co., Mo., has recently purchased and imported into Missouri, from Vermont, eleven valuable Morgan mares for his son, Arthur B. Barret who has a farm in Montgomery county. About one year ago Dr. Bar-

ret also purchased for his son the fine Morgan Stallion, "Genl. Stark." Many of the mares recently purchased, are in foal to some of the best Morgan stallions in Vermont.

We are glad to see efforts made to improve our breed of horses. The Morgan horses are noted for their hardiness and great powers of

endurance. They are also celebrated for their fine style and beauty. They are emphatically the farmer's horse. They are peculiarly adapted for the work of the farm. As roadsters they are also unsurpassed. They are generally of medium size but possess great muscular power. They also possess greater depth and breadth of body in proportion to their height than any other breed. As horses of all work, such as farmers need, they are unrivalled and we are happy to see our enterprising citizens introducing them into the West.

The following are the Pedigrees and descriptions of the mares as furnished by Dr. Barrett:

No. 1.—**ROSE OF SHARON**—A red chesnut, 17 years old, the dam of Lucy Warder, for whom \$1500 has been refused, was by Gifford Morgan, the best son of Woodbury; her dam by Morgan Emperor, grand dam by Morgan Eagle, gr. gr. dam by old Justin Morgan. Gifford Morgan was by Woodbury, and his dam by Henry Dundas, grand dam by True Britton, gr. gr. dam by De Laney's imported Wild Air. Morgan Emperor, the sire of the dam of Rose, was by the Bulrush Morgan, and his dam by imported Prince William. Morgan Emperor, sire of the grand dam of Rose, was sired by Woodbury Morgan.

No. 2.—**ARABAS DAUGHTER**—Also a red chesnut, 4 years old, by a genuine Arabian imported to this country by Mr. Pingree, of Salem Mass., about 1840, presented to him by Sultan Muscat as the best of his stud. Arabas Daughter is out of old Rose of Sharon, whose blood has just been given.

No. 3.—**SALLY GIFFORD**—A red chesnut, 14 years old, by Gifford, her dam by the Barker horse, grand dam by the Putnam horse, gr. gr. dam by the Day of Algiers. Barker Horse, the sire of her dam was by Woodbury, his dam by Young Diomedes, he by old imported Diomedes. Putnam Horse, the sire of her grand dam, was by Woodbury, and his dam by Chanticleer, gr. dam by Messenger, imported. The Day of Algiers, her great grand sire, was a true Arabian or Barb. Sally is a famous trotter. She is in foal to Young Rattler.

No. 4.—**SYLPH**—Red sorrel, 4 years old, out of Sally Gifford (above) her sire old Rattler, by imported Magnum Bonum, &c. &c., his dam, (the dam of Lady Suffolk), by Engineer by imported Messenger. Ratler was a large, powerful horse, trotted tremendously, and has produced fine stock. That he was half brother to Lady Suffolk is alone enough to give him character. Sylph is small, but has a good frame and length. Her sire and dam were both large and she will grow. Her style and action are unsurpassed.

No. 5.—**YOUNG SALLY GIFFORD**—Red sorrel, 3 years old, also out of old Sally, not so elegant as Sylph, but large and likely. She was by Young Ratler, he by old Ratle, mentioned above, out of an Engineer mare. Young Ratler without any regular training, trotted his mile in

2.40, at the fair of this State, and took the first prize both for speed and looks.

No. 6.—**JANE RICE**—Red sorrel, a yearling, very pretty, full sister to Young Sally Gifford.

No. 7.—**YANKER BELLE**—Red sorrel, 4 years old 15 1-2 or 16 hands high, sired by old Ratler, her dam by Black Hawk, her grand dam by Remington's Hamiltonian, great grand dam by Hill's Sir Charles, gr. gr. grand dam by Barnum's Cock of the Rock, gr. gr. g. grand dam an imported mare, first imported to Canada thence to the United States; Black Hawk, the sire of her dam, is of world renown as a trotter and as a breeder of trotters, and Remington's Hamiltonian, the sire of her grand dam, is the sire of Ripton, Confidence, Enterprise and some fifteen or twenty other horses that have trotted with distinguished reputation, was by Bishop's Hamiltonian and he by imported Messenger. Hill's Sir Charles, the Sire of her great grand dam, was by the famous Durock, the sire of American Eclipse by imported Diomedes, and his dam by Plato, by imported Messenger—Cock of the Rock, the sire of her great great grand dam, was also by Durock, (just named) and his dam, Romp, by imported Messenger, full sister to Miller's Damsel, the dam of American Eclipse, and both out of the imported Potesse mare; of the English mare imported into Canada, her gr. gr. gr. grand dam, her blood is not known, but it is no doubt good, as an inferior mare would not have been imported. It is thus seen that she combines the blood of Ratler, Black Hawk, Remington and Bishop's Hamiltonian, Durock and Diomedes, with more Messenger crosses than perhaps any mare now living.

No. 8.—**MARY CALDWELL**—Roan, 12 years old, was by the York Messenger, of the State of Maine, he by imported Messenger; her dam by Whalebone Morgan, her grand dam by Royal Morgan. Whalebone Morgan sired the Whalebone gelding who with Lantern in double harness, on the Long Island course, beat Stella and Alice Gray in 2.42. She is in foal to Goodale's Selim, he by the Pingree Arabian, before named.

No. 9.—**NANCY DICKINSON**—Yellow bay, 12 years old, was by Green Mountain Morgan, he by Gifford, &c. Her dam by old Remington Hamiltonian, (see above); her Grand dam by the Hibbard Horse, he by Woodbury, &c. She is probably in foal to Rice's Young Ratler.

No. 10.—**PATTY LAWRENCE**—Brown, 10 years old, has a powerful frame, and is a *mighty goer*. She was by the old Remington Hamiltonian, her dam by Young Hamiltonian or Judson's Hamiltonian; her grand dam by Barnum's Cock of the Rock, (see above); Young Hamiltonian was by Bishop's Hamiltonian, by imported Messenger; his dam was by Leonidas, and his grand dam by the noted Bellefounder. Patty is in foal to Truant, a Black Hawk.

No. 10.—**MOUNTAIN MAID**—Iron gray, 4 years old; the true type of old Gifford her grand sire; symmetrical and very stylish; her mother has produced several colts that trotted well and sold for high prices. She moves beautifully, was

by the Seymour Gifford, he by old Gifford, &c., his dam bred by Gov. Paine, by old Woodbury, grand dam by old imported Rockingham. The dam of Mountain Maid was of the Messenger Stock.

### BOTS.

In the summer months, a fly is seen busily engaged darting about the horse, depositing its eggs, which adhere to the hair of the horse by means of a glutinous fluid, with which they are covered. The animal breaks them with his tongue in licking himself, and a small insect escapes and is taken into the stomach, where it fastens itself to the circular or insensible coat of the stomach, by means of two hooks—"one on each side of its mouth." (Youatt on the Horse.) The hooks on its tail, the head hangs pendulous on the stomach. (Scarvington's Modern Farrier.) When doctors disagree disciples then are free. They remain there and grow until the following spring, when they lose their hold, and pass off through the alimentary canal when they take their shelter in the ground, and after a few weeks appear in the form of a fly. Hardly a horse falls sick, but these creatures are charged with the mischief by some ignorant people, yet the horse enjoys the most perfect health, while his stomach is full of them. Mr. Bracey Clarke says he thinks they benefit by stimulating the stomach and increase the digestive powers of the animal. If this be the case they are sometimes dilatory in the discharge of their duty, in the opinion of the writer, who thinks he has seen cases where it would be a good idea to administer a few, could they be obtained. Mr. Youatt thinks they cannot give the animal any pain while they inhabit the stomach; that they feed on the mucus of the stomach. Mr. Scarvington says they feed on the food of the horse, and sometimes take more than their share, and the animal loses condition. Doctor Dadd says he has heard wonderful stories of their burrowing through the stomach, but denies it in toto. Mr. Blain affirms that the symptoms would be the same as other worms. They cannot be destroyed in the stomach; they live in oil or spirits of turpentine for hours; the strongest acids do not immediately destroy them. They cannot be removed from the stomach by medicine; they are not in that part of the stomach to which medicine is conveyed; and yet we hear people tell of their letting go their hold to eat milk and molasses, when, before they know it they can be hurried out of the stomach by some cathartic; but supposing the hooks to be as Mr. Scarvington says they may eat what they choose, and yet retain their hold in perfect safety. Do you ask what is to be done with them? We answer, our way is to let them alone; nor do we believe they often injure the horses to any serious extent; that most of the cases said to be bots at work, are cases of colic or inflammation of the bowels and might usually be relieved by proper means. It is a frequent thing to find them in the stomach in making examinations after death from other diseases but there is no evidence, so far as the writer knows, of their destroying the life

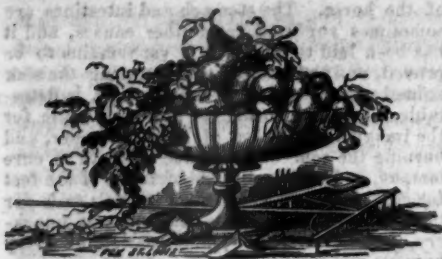
of the horse. The stomach and intestines are sometimes ruptured from other causes, and it has been laid to bots, but it yet remains to be proved, and the practice of torturing the sick animal with medicine to destroy bots is detestable. It is like boring the horns of cattle for the imaginable disease of horn distemper, and burning the roof of the horse's mouth to cure lampas, and cutting the bladders out of the feet for ringbone, and cutting off cattle's tails for tail-sore—all of which is the meanest quackery, and deserves the condemnation of every humane and intelligent man.—*Ex.*

### TRAINING COLTS.

Professional horse breakers generally use brute force in making horses gentle and tractable, but this system subduing animals is not advisable. It is better to effect the desired result through kind, gentle means. Young colts may be broken to the saddle or harness long before they are able to endure labor. The first operation is to put on a halter. The colt will resist and pull, of course, but hold fast with a strong arm, in as gentle a manner as possible, and in a few minutes resistance will be at an end; you can then lead the animal wherever you please. This primary step in breaking a colt, may be taken when the beast is quite young—from two months to two years old.

The halter should be put on as often as one can spare time, and the colt led about in a gentle manner. A little fondling while the halter is on, with a mouthful or two of food, that colts relish, given to the animal, will aid in creating confidence in you. After a while a sack may be laid upon the colt's back, while he is led about the yard; and after a few trainings in this manner, something may be put into the bag to make a little weight on his back. Then a saddle may be placed upon him, and a bridle put on; but on no account use any harshness, nor allow the animal to frustrate your designs. At the age of two years the boys may ride him a little, while the master is present to see that nothing is done to frighten the colt, or otherwise misuse him. Soon after this the harness may be put on, and he may be attached to the fore wheels of a wagon, with shafts so long, that if he happen to kick up, his heels will not come in contact with the whiffletree. After becoming thoroughly used to drawing these wheels, they may be loaded with a few sacks of grain, and you may try your colt upon the road and see how he goes up hill. If he refuses to draw on rising the hill, use no severity, nor great urging; as it is better to unload him, and let him go up with the bare wheels, or to return home, than to use the least harshness in your management. All that is needed to make a very gentle animal, and one that will never flinch in labor, is to treat him kindly, and never allow any person to manage him unless he is perfectly qualified to act in accordance with the above suggestions.—*Rural American.*

It costs no more to raise a good animal than a poor one and the good one will sell for double the money.



## Horticultural Department.

### Gathering and Storing Apples.

In gathering apples, too little care is taken by many to prevent bruising. Apples should never be shaken from the trees, but should be carefully picked. To do this with facility, a self-supporting ladder, a bag suspended from the person's neck or a convenient basket, are required. If apples are to be kept, they should never be emptied from the basket into a barrel, but should be removed by hand, and in removing the barrels, they should never be rolled, but should be taken up bodily and transferred to wagon or boat. It is unnecessary bruising, consequent upon rough handling, that causes many apples to rot. Apples of good keeping kinds, when properly handled, may be kept until spring, when they will command the highest market prices; whereas, when roughly handled, the same kinds will decay before mid-winter.

In the last volume of the Farmer, we gave a very complete plan for the construction of apple and potato houses. Those who have not provided these can have a very convenient fruit room in one part of the cellar. For this purpose the dryest and coolest corner should be selected. This should be partitioned off, so as to exclude the frost, and shelves should be so arranged as to admit of a circulation of air around the fruit. These shelves may be placed near together, so that a large quantity of fruit can be stored in a room ten feet square.

When it is not convenient to provide a room for the purpose, a few barrels of late keeping apples may be kept in the most perfect condition nearly the year round, simply by carefully picking, and, after they have remained a while, say till January, assort them and place them into barrels; provide a quantity of clear sand, thoroughly dry it in a large kettle over a fire, and when cool turn it into the barrels, so as to fill all the interstices between the apples, and

place them in a cool, dry place in the cellar. A better method still, is to place them in the barrels with cork chips from the cork factories. These should be ground into coarse meal. This is one of the best substances for preserving fruit with which we are acquainted. A few bushels thus preserved a month or two beyond the ordinary period, are a great convenience as well as a luxury in every family.

It should be remembered that apples keep best in a temperature as near as possible to 32 degrees.

### Peach Crop in Maryland and the West.

We presume many of our readers have heard of the extensive peach orchards of Anthony Reybold & Sons, of Maryland. Their farm consists of 650 acres, 400 acres of which are planted in peach trees. The orchard, the present season, is not in as good condition as usual, notwithstanding, from the 5th of August to the 25th of September, they gathered and sent to market from 800 to 1,500 baskets of peaches per day, averaging from 50 to 100 hands in gathering &c. Two steamboats are constantly employed in carrying the fruit to the Philadelphia market. Some years ago 70,000 baskets were gathered from this farm in a single season. In 1854 the crop sent to market was 25,000 baskets, which brought the average price of \$1.14 per basket; in 1855, 42,000 baskets, at 36 cents per basket; in 1856, about twelve thousand baskets, averaging \$1.50 per basket. The cost is about 22 cents a basket to gather and get the fruit to market. The price is governed by the quantity. The most profitable seasons are those in which there is the greatest scarcity. The net receipts from this farm in 1854 were \$23,000; in 1855, \$5,980; in 1856, \$15,360.

We introduce these statements with the view of making some remarks upon fruit growing in the West. It is well known that in the parallels of latitude 38 and 39 the fruit crop generally is more liable to be cut off by late frosts than it is on either side of these parallels. In the North, the cold weather continues to so late a period in the season, that when spring opens it is seldom interrupted by severe frosts, and in the South, after the buds open frosts are less frequent than with us. But there are many elevated situations, such as the bluffs bordering on the Mississippi river, along the Ohio river, like those back of New Albany, Indiana, and near the banks of Salt river in Bullitt county, Kentucky, where peaches are seldom

cut off by the frost. We have frequently referred to this fact and have urged the holders of these lands to establish the culture of fruit on them. There are now many such situations within convenient distance of newly established railroads which afford the facilities for transporting the fruit to market. Peaches here will come on several days earlier than they will one or two hundred miles further north, enabling the grower to supply Cincinnati, Cleveland, Buffalo, Chicago, St. Louis and other markets, realizing the best prices. In seasons too, when the crop generally, upon level land is cut off by frost, the crops from these situations will command extraordinary prices. Fruits of all kinds will command good prices; the facilities now for sending it to every part of the country are such that the demand must always be in advance of the supply.

We recommend the subject particularly to the consideration of those who own lands situated as we have described.

#### **Exhibition of the Cincinnati Horticultural Society--Meeting of the Ohio Pomological Society.**

To nothing is the West more largely indebted for the great variety and superior quality of the fruit now so abundant, than to the Cincinnati Horticultural Society. It has been organized about twenty years, and during a large portion of that period, it has held regular, weekly meetings, at which all the varieties of fruit that are in season, are exhibited, and their merits discussed. In addition, for some years past, the society has held regular, annual exhibitions, at which large collections of the choicest specimens of the various fruits of this region were to be seen. The exhibition the present season was opened on the 8th of September and continued to the close of the Ohio State Agricultural Fair, on the 18th. With these united attractions we spent the week of the fair in Cincinnati, and a more magnificent display of fruits, flowers and vegetables, we have never witnessed.

The exhibition of the Horticultural Society was held on a vacant lot, considerably beyond the canal, and notwithstanding the distance from the centre of the city, the spacious tents were constantly thronged, night and day, with thousands of admiring visitors. For these annual exhibitions the society has provided five large tents 540 feet long and from 25 to 40 feet wide. The arrangement of the ground is a

matter of considerable labor. To add to the attractions, two splendid fountains were established and kept constantly playing. One of these issued from the centre of a large basin, or pond, surrounded with artificial rock work. This was over grown with majestic evergreens, of different varieties, and with all the ferns, aquatic plants and trailing vines natural to such situations. In the midst of this bower, near the top of the rocks, issued a miniature waterfall, giving to the whole a most interesting and cooling aspect. The immense tables that ran through these spacious tents, were all loaded with the rarest exotics, cut flowers, fruits of every variety known to the country, and vegetables of the most perfect growth and mammoth dimensions. Of apples and pears the show was very extensive as to quantity and variety.—Peaches and plums were not so abundant, yet many choice kinds were exhibited. Seckel and Bartlett pears, about the best in the catalogue of rich fruits, were in the greatest profusion, and of extraordinary size. It is the opinion of the best judges that a better display of fruit has never been exhibited in this country than was found in the collections of this exhibition and at the State Fair, leading one to almost feel that he was within the precincts of the Garden of Eden with our first parents.

#### **THE OHIO POMOLOGICAL SOCIETY**

Held its meetings during the week. These meetings are held *biennially*, in various parts of the State of Ohio, alternately with the sessions of the American Pomological Society, which claims to be more national in its character. At these meetings very interesting discussions were held upon the merits of various fruits, and their adaptation to different localities, diseases of fruits and fruit trees, naming and classifying new seedlings, &c. The proceedings of this convention will be prepared for publication by Mr. M. B. Bateham, and such portions as will be thought of interest to our readers will be published hereafter.

We should be glad to see a more universal interest manifested in these matters. Every town should organize its Horticultural Society, and thousands should attend its fruit conventions, where hundreds now attend. The fruit interest of the country has increased to one of no small magnitude, and should be fostered by every lover of his race.

Let Horticultural Societies be established in every town of any importance and especially in every city.

[For the Valley Farmer.]

**THE HOLLYHOCK.**

The cultivation of the hollyhock has for years past received less attention than it deserves. Its great antiquity, majestic height and attractive flowers of every shade and color, should justly entitle it to a prominent place not only in the American flower garden, but in the borders and clumps of the pleasure grounds. Its hardy nature, easy propagation, and ornamental qualities, have no right to give way to any of flora's ornaments for grandeur and beauty. Its noble stalks, clothed with rose-shaped flowers of every hue, varying from the purest white to the richest velvety black, give variety and gaiety to all around. The neglect of the cultivation of so old and valued an associate, can only (justly) be ascribed to the willingness with which it grows and ornaments the humble but honest cottager's garden.

But let me here remark that to the embellishment of large grounds, they are well adapted, if in planting they are judiciously arranged so as to give effect to their majestic appearance. This however, would be a dangerous undertaking for a person not well skilled in landscape scenery, as the "tutored eye" would at once discover the fraud, and as readily discover the position they should occupy.

The hollyhock, however, like a useful custom in the form of dress, is subject to be assailed by the ever restless fashion of the times, when its fate for a time may be sealed, until a sober conviction of its utility ushers it again into favor. Such has been the fate of the hollyhock—alternately praised, and as often desecrated to make room for something else, having, probably only novelty for its chief recommendation, proving that

"Fashion,  
However ridiculous, still is followed."

After lingering in exile among the outcasts of old associations, and its name immured in musty records, or striving for existence, half buried among shrubberies for nearly half a century, it is again being introduced in our modern lawns, to adorn with a profusion of flowers those situations it is so well calculated to clothe and decorate.

The primary object of the grower should be the selection of good sorts. The most desirable are those possessing stiffness of petal, in connection with the form of the flower; and would further advise those in favor of cultivating them to secure plants of the double variety.

In planting, let us look at the arrangement. We could view with pleasure scattered groups or solitary plants, rising by the side of the falling cascade, or at the base of rugged rocks, or by the sides of the rippling stream. And when passing over the wide spanned bridge, we could admire its entrance guarded by hollyhock pillars, well constructed and closely planted round, supported by neat and suitable iron stakes.

On a late visit to the residence of D. H. Cowan, Esq., Bellevue House, near the Bardstown road, I had the pleasure of seeing among his varied collection of choice shrubs and plants, the best collection of hollyhocks it has ever

been my fortune to see in this country. His seed was imported from Vilmoran, Andrew & Co., Paris, France, and strange to say, out of his package of seeds not a plant produced single or semi-double flowers. On the contrary, his whole stock were perfect double flowers, running into every shade, and rivaling in form the far famed La Reine rose.

Had we more amateurs like Mr. Cowan, who would annually invest a little of their money in the introduction of genuine seeds from the fountain head, as he has done, we would soon rival the Eastern States in choice and rare plants.

JAMES KENNEDY.

Louisville, Kentucky.

**Ever-Bearing Autumnal Raspberries.**

Varieties of this class of Raspberries are rapidly accumulating; but a few years ago the "Ohio Ever-bearing" was the only sort known; now there are enumerated in nurserymen's collections some half a dozen or more.

We are not yet in possession of sufficient experience to say whether any of them are adapted to extensive cultivation for market purposes, but we have no hesitation whatever in directing the attention of amateur and experimental cultivators to them as a means of prolonging greatly the season of one of the most healthy and delicious of all our small fruits. We have heard it remarked that inasmuch as every season brings with it its peculiar fruits, it is hardly worth while to produce any fruit out of its natural season. There is some force in this we admit, yet we cannot see why it is not as desirable to produce fine raspberries in the month of September, as it is to ripen grapes in winter or early spring. Indeed there can be no question but that the advancement of Horticulture will produce in time not merely fruits of superior character, but skillful and ingenious hybridization and other scientific processes, will originate varieties of many of our garden fruits that will ripen out of what is now called the natural season, and greatly increase the value of others and the enjoyment to be derived from them.

To us it appears as if this were a field for the most interesting experiment, and from this point of view we regard these Ever-bearing Raspberries as an important acquisition. We hope cultivators will not be backward in testing their value and let us know the result.

1. The *Ohio Ever-bearing* is simply an ever-bearing or autumnal-bearing variety of our native black sort, known as the Black Cap, a roundish flat berry, quite black, covered with a whitish bloom or down. It is now in full bearing, and it often, not always, bears a full crop in September and beginning of October. To our taste it is not to be compared to the delicious Antwerps and others of that family, but many express a preference for its sprightly, peculiar aroma. It has one great advantage—it is hardy, standing well where others are killed.

2. The *Catawissa* is a more recent discovery, picked up in a wild state in Pennsylvania. It

has been very favorably spoken of by some who are competent to judge, but we have not seen it sufficiently to speak with much confidence. It is a berry of medium size, purplish red, good flavor, tender, and we notice fruit in all stages of growth now upon the canes.

3. The *Large Fruited Monthly of Rivers* was imported from England to this country several years ago. This is a red, roundish fruit, somewhat of the character of the *Fastolf*, but not so large, it bears an abundant crop in July, and if the weather be favorable, another in the fall on the canes of the current season. This crop, however, is not reliable, as it depends much on the weather and the treatment. Where a fall crop is desired, only the strongest canes should be left, and these should be well treated by good culture of the soil, and if need be, supplied with water. This remark will apply, indeed, to all this class.

4. The *Merveille de Four Seasons* is another red variety, from France, of good size and great excellence; it bears well in July, and if the canes for fall bearing are well managed, a good crop in September. Last season, in the latter part of September and beginning of October, we saw it loaded with superb fruit in a situation where it received no particular care. We place this at the head of this class without any scruple, and believe it well worthy of cultivation.

5. *Belle de Fontenay*.—This is another French variety of the largest size, dark crimson color, and remarkably firm—well suited in this respect to carry to market. The flavor is sweet, and sprightly, quite peculiar to this sort. The canes, too, are so distinct as not to be confounded with any other; very stout, with short, dark spines, foliage dark green, heavy and much crimped. They are also produced in great abundance. It does not bear as well as the preceding, many of the blossoms being abortive, but the fruits that do mature fill out well and make a superb show.

There is a white over-bearing sort on the lists, but we have not seen enough of it to give an opinion of its merits or make any description of it. We shall take particular notice of this class of Raspberries in the autumn, and report upon their fruitfulness.—*Rural New Yorker*.

### FRUIT TREES.

The subject which I am about to remark upon is one that should interest your readers and the public generally—one that demands much attention and will bear further investigation without becoming exhausted. Much has already been written and said in regard to the cultivation of fruit and fruit trees by some of the most eminent Pomological men in the country, and yet the horticultural field is still open for improvements. Notwithstanding all that has been said, there is a great deficiency and lack on the part of amateurs and others, and when we consider the many social enjoyments, the luxuries, the great convenience, and the profits there is to be derived from having a good supply of the different varieties of choice fruits, we may easily come to the conclusion to which I have arrived, that there is not one-tenth part of

good choice fruit raised that there might and should be through the country. In the first place our soil and climate is well adapted to growing many delicious kinds, in fact there are but few varieties which we may not cultivate with entire success, and yet how few do we see grow to perfection. There is scarcely a month or a week, or even a day, of the whole year that we may not be provided with some kinds. Apples may be kept the year round. Pears may be had from the first of August until February, making nearly seven months in succession. Grapes may be raised in abundance and kept fresh as late as March, or perhaps later. Choice cherries may be had from June until August. Apricots are ripe in July and August. Peaches follow with many other kinds of summer fruits, and may be had until early frosts. Plums are quite hardy and may be easily raised and had from August until late in the fall. There are many other kinds of small fruits I shall not attempt to mention at this time that deserve a place even in small gardens.

Now, I ask, is there not a great lack in producing the fruits above mentioned? I think I am not alone in this conclusion. The fact should be generally understood that he who plants trees plants for himself as well as his heirs. People have been deceived in the estimate of time required to produce fruit from young trees. With good cultivation we may obtain peaches and grapes in three years from planting. Pears have been raised at the rate of one peck per tree in two years. Apple trees have produced one bushel each in five years from trees one inch in diameter when planted. One hundred and twenty barrels of apples were picked from one hundred trees in six years from planting. Proper care and after culture cannot be too strongly urged upon those that set trees. It is an indispensable requisite that the ground should be kept rich and mellow for a few years until they become well established.

The pecuniary profit of fruit is by no means an item to be overlooked in treating of this subject. The high price and great demand for choice fruit makes it still more of an object for the producer. In fact many are not aware of the great profit there is in raising the most kinds, but fear of making this too lengthy, I will not go into detail, but suffice it to say that no crops the farmer produces pay so well as good fruit. Many instances might be named where immense profits have been made from small orchards, and even from single trees.

J. B. JOHNSON. *Ibid.*

Trees in being transplanted, to do well, must be taken up with care, with all the roots possible. These should not be exposed to the sun, wind or frost. The ground in which they are to be planted, should be deeply plowed—large holes dug to receive the trees, which must not be planted quite as deep as they stood in the Nursery, as the ground will afterward settle. No grain crops should be cultivated around them—but root crops are most suitable, as the hoeing of them will aid in keeping the ground mellow about the trees.

## The Home Circle.

### NOTES BY THE WAY.

PAPER MILL VILLAGE, N. H., }  
Aug. 29, 1857. }

MR. COLMAN:—In my travels I have been careful to note the improvements of every kind on the farms, in the shops and in the homes, among the hills of New England. The spirit of progress is here as well as in the West. It is everywhere in our country. Though the farms in this country are generally rough and hard to till, they are made productive, and farming is said to be the very best business of New England. If the best in New England how much more so in the West. The farmers here are thrifty and growing. They are up with the times. Almost every where I see evidences of improvement in new barns, houses, sheds, farming tools, fences, embellishments, conveniences, comforts, both in doors and out. In the matter of buildings there is much to be admired here. Every farm has good barns, carriage houses and sheds, so that hay, grain, tools, wagons, carts, &c., shall be kept under cover, as well as all the stock. There is a very general building of new houses, the old houses having become the worse for the wear, or behind the times in conveniences and taste. The plans are generally models of convenience, having all the necessary rooms, with cupboards, closets, pantries, recesses, &c., &c., in every place where such things can be convenient. The kitchens and dining rooms especially, seem so perfect as almost to work without help. The water, wood, cellar, pantry, sink, cook-table and dining room door are all as near the cooking stove as they can be and none of them more than a few feet at the farthest. It is a general practice to have a year's stock of wood on hand all the time, fitted for the stove and neatly packed up in the wood house. Then I have been greatly amused and pleased with the new articles of kitchen furniture, the graters, sprinklers, toasters, iron heaters, egg beaters, and it would seem every possible little contrivance to expedite and make pleasant the kitchen work. I have often had to enquire the use of articles I had not seen before. Much as I have been in favor of convenient houses and working utensils I had scarcely conceived of the perfection of convenience that I see now is attainable. I mention these things that my readers like myself may be stimulated to efforts to make their own homes both convenient and comfortable. These Yankees are close pocket-

ed and economical, but they will have neat and convenient homes. They know how to invent, make and use beyond all other people. They have a keen sense of the beautiful, so inside and out their homes are pleasant to look upon. Beautiful fences, yards, shrubbery, trees, abound in all the villages and about many farm houses. The general style of building both in villages and on farms is the cottage, one story or a story and a half, with pretty steep roofs, giving space for good sleeping rooms above.

There is generally one or two sleeping rooms below, for the parents and small children. Every sleeping room has a closet, and where convenient a cupboard shelved up. In one thing the houses here generally lack. That is a bath room. The ceilings are generally too low, being not often over 8 or 8 1-2 feet high.

In the outward embellishments of home it seems to me that the people of the west ought to surpass all others. Their soil is so productive that trees, shrubs, vines, &c., will grow obedient to their wills and taste. And in comfort and convenience what need is there that the Yankees shall surpass us. Why cannot we invent, make and use as well as they? We can make two dollars to their one, why shall we not outdo them in the comforts of our homes. We are richer than they, why not live better. There are two things the yankee thinks he cannot live without a comfortable home and educated children. For these he will toil his life-long among the rocks. These we may have in the west with far less toil.

NIAGARA FALLS, Sept. 11, 1857.

MR. COLMAN:—I have been almost two months on the wing, seeking strength, rest, pleasure and profit, and I have got not a little of all for the time I have been out. I am now returning home—yes, home to the West, and away from the home of my youth at the East. Home! How sweet the word. It seems to me to have taken on a new meaning of late, especially since my late visit to the "old homestead." I knew not till then how deeply the roots of home were planted in the soil of my heart, how every tree, rock, field, spring, brook, grove, wall and scene of that budding place were engraved upon my soul. Everything greeted me like an old friend dearly beloved. Every room in the hospitable old house seemed pleased to have me come back. Oh, how many pictures of the past were hung around their walls and spread upon their ceilings and floors. I was full of the past. The old windows, cupboards,

doors, talked to me of olden times. Every familiar thing had its story of the past to recall. The orchard, the well, with its strong old sweep and pole, the garden, the yard, had much to say of father and mother, brothers and sisters, and the dear times when "we children" were so full of a thousand plans and plays. Then quickly came flocking along the avenues of my memory whole troops of by-gone friends, dear and good as any my heart has ever known.—Some from their graves, some from distant lands, they came to assure me, if not of their love to me, surely of mine to them. My heart was brim full and in a few hours I re-lived much of my early life. Never was my memory more active or my heart more affected by a retrospect of its own experience. And I said to myself if such is the power of home to impress the young mind, nothing is more important than that every home should be full of the holiest and happiest influences. If every material thing about one's home becomes associated with his mental experiences and written over, as it were, with the stories of the heart, how important that both the material and spiritual influences of that home are the best that can be had. And then how important that that home be permanent, and be kept as a household shrine around which may grow up the most virtuous devotion of the heart. I have always felt that if our homes were all right the world would be right, and now I feel it more than ever. I have pledged myself anew to live for the good of human homes. Instead of the struggle for wealth and fame let us have a general effort for beautiful and peaceful homes, and how soon the earth will become a sort of paradise. The pictures we hang in our children's minds should be as beautiful as we can make them. The best pictures, the most salutary and lasting impressions will be those derived from the general character of the home in which they are reared. The rule is that they will be like, or much like the home from which they come. A sweet fountain doth not send forth bitter waters.

Who are our criminals? Who are the unfortunate victims of vice and shame? Generally they are the children of homeless parents, or of those whose homes are scarcely entitled to the name. Then what shall we do? Make for ourselves the pleasantest homes we can; ornament them without; purify them within; fill them with peace; shed around them the halloving wisdom and love of the christian teachings; live for them in the fear (reverence) of God and love of man. This do and our homes will greatly bless both ourselves and our children.

[Written for the Valley Farmer.]

## THE LAUNDRY.

BY HETTIE HAYFIELD.

Perfection in this branch of housewifery does not contribute so much to sensual enjoyment, as skill in the management of culinary concerns. Granting that the vulnerable point of good will lies in the stomach, it follows that the censorious will be less severe if the table linen is not snowy white and smooth, than if the same qualities were wanting in the breakfast rolls and cakes. Yet the fame and gratitude springing from our contributions to appetite, are circumscribed to the circle of our intimate friends, while the merits or demerits of our laundry are carried as an advertisement on our husband's bosoms, flaunted in every crowd wherein our daughter spreads her crinoline, and flutters cut of every window of our houses like an auction flag, challenging notice.

### WASH HOUSE.

Even in the smallest establishment this house cannot be comfortably dispensed with, and we verily believe that one half of the dirt and discontent that mars the happiness of our homes, is traceable to the custom of washing in our kitchens. It is too much for woman-nature to look upon heaps of foul linen, sloppy floors and all the abominations of wash day, and not feel disgusted, at its close associations with her table preliminaries. And yet she is thrice blessed if the finale is not in her own particular chamber. If her own sanctum is not turned into a pandemonium of rough, dry clothes, sweating maids, thermometer at blood heat and momentary danger of making a rueful wreck of your matchless baby face, by coming in contact with a hot iron.

We think there are few wives after a little experience who would not convert one of the double parlors and its rose wood furniture into a snug wash house.

Husbands would probably demur for they know little of the discomforts of wash day, save the cold dinner and wife's vinegar aspect, that scandal associates with it, and we are sorry to add, pride is stronger in our land than a rational love of home comforts—ergo—well furnished parlors are had at any cost, and a wash house now and then as a special concession to a very dear, capricious wife. Our limits do not allow us to specify plans but we suggest that a well ventilated room, capable of summer warmth in winter, with a capacious closet for the furniture necessary for washing and ironing will do. There should be a wide fire place or furnace for at least two large kettles. In or near the house there should be a full supply of good water, and a pipe for leading off the dirty water. In the slave States where extensive beef hog and wool crops have to be handled, the wash house is convenient to use for such purposes, in which cases the drying and ironing should be provided for in a separate room appropriated solely to such uses. If the floor, wood work and outside of the vessels are painted it will be much easier to keep them clean.

### FURNITURE.

There should be one or more large kettles.—

Copper is best as it precludes the possibility of iron-mould. Buckets and tubs with wooden handles are best, as careless washers often let clothes be ruined by contact with iron hoops and handles. A stout bench on which to set the tubs saves from the fatigue of stooping. Each washer should have a grooved wash board and a cup of soap. There should be clothes horses for hanging clothes in bad weather, or rings on opposite sides of the wall, from which lines can be stretched. (There should also be posts in some sunny, grassy spot for the same use in fair weather.) There should be clothes pins, starch canisters, barrels for soap, a kettle for making starch, clothes baskets, ironing table, skirt and bosom board, irons of several sizes, stout blankets and sheets, iron stands and holders, not omitting soft old towels for wiping the irons. There must always be on hand first rate soap, starch, ox gall, gum arabic, salt, spermaceti, bees wax and indigo and materials for any washing fluid you use. All these things should be kept on hand and locked up to prevent waste or misplacing.

#### WASHING.

The evening previous to washing, all the clothes should be gathered up and assorted.—Woolens, colored clothes, unbleached cottons and linens and fine clothes, each into their respective baskets. Except woolens and colored clothes, all other kinds should be put to soak, the night previous to washing, the very dirty parts having soap rubbed in them. If you use no washing fluid, the next morning wring out the clothes, and proceed with soap and warm water to wash them carefully, through two waters, then boil them in a clean lather briskly, no more than a half hour. Wash them out of boil, and then rinse in two waters. The last rinsing water should have a delicate tinge of blue and a small quantity of starch for all kinds of cottons or linens; reserve those which should be stiffer for the last and mix more starch in the water. Skirts, shirt bosoms, collars and so on should be dipped in stiff starch when dry. Muslins and laces are dried, then dipped in starch and clapped with the hands until dry enough to iron. White grounded lawns and calicoes are washed like any white material, omitting boiling, until the yellow tinge they acquire makes it absolutely necessary. Unbleached cottons and linens, follow the fine white clothes through the same waters, but in no case must be washed or boiled with them, as they continually discharge a portion of their color and so discolor the white clothes. In directing the preparation for washing fluid we give the process employed with them, but colored clothes, in our experience, can be washed with none of them without injury to the color.

Calicoes, colored lawns and colored cottons and linens generally, are washed through two suds and two rinsing waters, starch being used in the last as all clothes look better and keep clean longer if a little stiffened. Many calicoes will spot if soap is rubbed on them. A spoonful of ox gall to a gallon of water, will set the colors of any goods if soaked in it previous to washing.

A tea cup of ley in a bucket of water will improve the color of black goods. Nankkeen should lay in ley a while before being washed to set the color. A strong tea of common hay will preserve the color of the French linens so much used in summer, by both sexes. If the water in which potatoes are cooked be saved and boiled down, it stiffens black calicoes as well as starch and saves them from the dusty, smeared look they often have. Vinegar in the rinsing water for pink and green calicoes will brighten them. Pearl ash for purples and blues.

Flannels should be washed through two suds and one rinsing water. Each water should be as hot as the hand can bear, unless you wish to thicken the flannel. Flannels washed in cold water or luke warm soon become like fullod cloth. The white and colored flannels must be washed separately, and by no means be washed after cotton or linen goods. There should be a little blue in the rinsing water. Allow your flannels to freeze after washing in winter; it bleaches them. Broad cloths, cassimers, &c., should be spread out on a table and cleaned with a brush. Ammonia mixed in water will clean pretty well. Camphene will clean but leaves a disagreeable odor. A beef's gall and a quarter of a pound of salaratus dissolved in two gallons of water will do it more thoroughly. Scour the garment with a brush dipped in this liquid; if this does not cleanse it wash it in the liquid and hang out to dry without wringing, after rinsing in fair water.

Silks should have spots extracted before washing. Wash them in a luke warm lather, rinse in luke warm water and hang up without wringing. Making the rinsing water slightly sour with sulphuric acid if you have yellow or red in wash.

Laces. Ordinary laces are done up like fine muslins. Fine thread lace should be wrapped round a bottle filled with water. Saturate the lace with the best sweet oil, then stand it in a kettle of clean, cold lather, heat it gradually. When it has boiled a half hour, drain off the suds, stretch the lace with your hands, and pin it on a clean pillow to dry. Or it may be washed in the usual way and dipped in rather weak coffee to give it the peculiar color desired.

Blonde Lace. Is fastened around a bottle and laid in a vessel of cold lather which should be changed every morning for a week. Rub your hand around the lace tenderly every morning before changing the water. The vessel should be kept in the sun.

Black lace is washed in warm water with ox gall and rinsed in fair water. Laces, crapes, gauze and silk goods should be stiffened in a solution of transparent ising glass or fine gum arabic.

Silk gloves and stockings should be washed in clean lather and rinsed in water slightly colored with blue, or carmine, if the pinkish tint is preferred, and stretched on frames to dry. If pressed it should be on the wrong side, but stretching and rubbing with a roll of linen is best.

#### IRONING.

All clothes iron best if taken from the line

when just sufficiently dry to smooth easily. If too dry they should be sprinkled and rolled into tight bundles and laid in a basket. Colored clothes should not be sprinkled until ready to iron; it injures the colors to lie damp. There should be a large table, covered with a thick blanket doubled, and a stout clean sheet. The skirt board and bosom board should have two or three layers of soft woolen cloth tacked on them smooth, then be covered with a close fitting case of stout, white cotton. Silks, worked muslins, tucked skirts, and all raised figured goods should be pressed on the wrong side—likewise black cotton goods, if possible. Most other clothes are ironed on the right side. The most particular parts of a garment should be ironed last. Pantaloon should have the fold up in front of the leg. Dress skirts at the sides. Bed and table linen should be mangled or ironed in great perfection. Velvet should be damped and have the wrong side run over the face of the iron. Clothes should be perfectly dried before putting away.

#### MATERIALS FOR WASHING.

We proceed to give as concisely as possible directions for manufacturing these at home. We have not space to describe the ash hopper, but there should be straw at the bottom for a filter, and clean, strong ashes should be packed in and well damped as they are being put up. After standing some days you should begin tending the hopper with boiling water, one bucket of water an hour. After the hopper becomes exhausted let one bucket each day be of strong lim. water. Soap grease may be used up as gathered and is best kept in a covered tub of ley, but soap is far nicer if you will boil the soap grease in moderate ley, until it floats clear on top—when cold it can be cut off and the bones, dirt, lean flesh and so on will be a sediment, good for your compost heap.

**Cold Soaps.**—Boil your ley until it will strip a feather of all down; pour it into kettles or a strong hooped barrel, that stands fairly in the sun; to six buckets of ley allow one of soft grease. Stir it every day, and after a week if too thin, stir in grease, a little at a time. It will make in about a month.

**Soft Brown Soap.**—When the boiling ley will strip a feather, put one and a half pounds of soft grease to a gallon of ley. When incorporated thoroughly, try it with a feather again and if it barely eats, there is enough grease; boil until it is as thick as you like it when cold.

**Hard Soap.**—When the boiling ley will strip a feather put in three-fourths of a pound of soft grease to two gallons of ley. Boil it (trying whether it has enough grease with the feather) until it becomes very thick, then throw in a pint of salt for every four gallons of soap.—Boil it a while longer; set it off, and when cool cut it in bars, scrape off the sediments, and put it on a shelf to drain. The ley, &c., in the bottom of the kettle is good for scouring.

**To Refine Soaps.**—Make a kettle of brine, 1 pint of salt to 1 gallon of water. In 5 gallons of water boil 15 pounds of hard soap for an hour. When cold cut in bars and scrape

from sediment; put on a sloping shelf to drain exposed to the sun for a week or two.

**Toilet Soap.**—Strain your ley; use clarified tallow in making hard soap—refine the soap with care, and after it has bleached melt and perfume with any oil you like and color it with paint. Mould it to your fancy.

**Washing Fluids.**—One-half pound of sal soda, two pounds hard soap, boiled 20 minutes in two gallons of soft water. Mix this in as much water as will cover 10 doz. clothes, soak the clothes a night; pour in warm water and wash them out; boil in suds and rinse as usual.

**English Receipt.**—One pound of soda, one pound of brown soap, six ounces unslacked lime, boiled in one gallon of soft water. Having soaked the clothes over night, wring them out and throw them into a kettle of 12 gallons of soft water into which the above compound has been mixed. Boil and rinse through two waters.

**Harvest Wash.**—Four table spoons full of alcohol, four spirits turpentine, one pound of brown soap scraped up into one quart of hot water. Proceed as directed in the English Receipt. This is first rate for the clothes of harvest laborers, but injures the fabric too much for constant use.

#### STARCH.

The raw material may be made of wheat bran. Mix a gallon of flour in a half tub of bran; fill the tub with water. When it shows signs of fermentation strain it through a sieve pressing the bran very dry. Strain the liquid next thro' a stout linen cloth, then through a close flannel cloth, repeating it until not a particle of bran is left in it. The starch will then settle to the bottom. Next morning drain off the water, pour on some fresh, and wash off gently the scum from the starch cake, drain off again and pour on some fresh water, stir up the starch thoroughly and leave it to settle—repeat this every morning until the starch is faultlessly white. The last water used should have a slight tinge of blue infused. When you take out the cake crumble it up in trays and expose to the sun until perfectly dry.

**Potato Starch.**—Potatoes being peeled and grated, you proceed as with wheat bran only the pulp need stand a few hours before straining. It is exquisite for fine muslins and laces and also for puddings and nice cakes.

A superior laundress neighbor says she never uses anything but flour for starch. To prepare starch, rub up a tea cup of starch into a smooth paste with water. Mix it in a half gallon of water, boil it a half hour, add a tea spoonful of salt, sugar, spermaceti or clarified tallow. Strain it and it is ready for use.

Gum arabic, or loaf sugar dissolved, or pure ising glass will stiffen well where the trouble of making starch is cared for. Gum arabic in starch improves it. Some persons make starch in coffee for mourning prints; we prefer glue dissolved; a piece as big as a silver dollar to 1 quart of water.

Stains, mildew or iron rust may be removed by dipping in acid water, covering with salt and exposing to the sun. We use citric acid and have to repeat the process several times.

## Editor's Table.

### The Weather and the Crops.

It has been a matter of serious apprehension, for some time past, that, owing to the lateness of the season, the corn crop might be overtaken, prematurely, by frost. Although the corn in June was at least one month behind the ordinary seasons, yet the favorable rains, generally over the country, and the temperature for the last eight weeks, which has been fully up to the corn growing point, has brought forward the crop so that it is now hardly more than two weeks behind the average of the seasons, with the prospect, East and West, North and South, of an unparalleled harvest. By the time this reaches the majority of our readers, corn, generally, south of the 40th parallel of latitude, if no frost occur, will then be past serious danger. The difference in the stage of maturity in the North and the South, is but a few days. In the North, the crop has come on with astonishing rapidity. In one or two of the extreme North Eastern States frost has already appeared, and in the most exposed situations, has done some damage to growing crops. But with two weeks more favorable weather corn will generally be past danger.

**Tobacco**—generally, looks well, and is in a fair way to mature. We have noticed some few fields which are very late, that cannot possibly escape frost.

**Potatoes**.—The crop, generally, East and West, is large. In the North and East, in many sections, the entire crop has been swept off by the rot. This mysterious disease, the present season, has proved much more disastrous than for a number of seasons before. We have noticed the vines of whole fields, in New York, while in the midst of their most vigorous growth, suddenly change from a most healthy green, to a dead, black mass, like tobacco plants, cut off by a killing frost. This change of the leaves and stems of the potato is a sure indication of the destruction of the tubers by rot.

One fact is a little mysterious, and may teach a lesson by which the world may profit. Potatoes on ground that has been thoroughly under-drained and well cultivated, have this season been known to entirely escape the rot, while, in the immediate neighborhood of other fields, of the same quality of soil, and not drained, entire crops have rotted. Another fact is worthy of notice. While in the more natural, and cool soil, and climate for the potato, in Maine, New Hampshire, Vermont and New York, the rot has been most disastrous, and except in some places, in northern Indiana, we have heard of no instances of rot, in the warm, dry soil of the West and South West.

Every phase and feature of this disease, should be studied in connection with all the facts we have given, and with as many more as may be considered as having a bearing on the subject, until, if possible, a cause and cure shall be discovered.

**CHOICE FRUITS**.—We are indebted to Mr. Jacob Johnson, of Jefferson county, Ky., for choice specimens of peaches and apples. Among the former are the Queensbury, Early Newington, Orange Cling and Old Mixon Cling, all known as excellent peaches. The Ear-

ly Newington has no superior in quality. Among the apples are the Gravenstein, a most beautiful, striped apple of foreign origin, and the Porter, one of the best fall varieties of the Boston market, which for size and beauty more than sustains its character in our climate.

### Ohio State Fair.

The great annual State Fair of Ohio, was opened at, or near Cincinnati, on the 15th of September, and continued four days. The occasion was one of great interest to the people of Ohio, and the surrounding States, many thousands of whom visited the grounds during the continuance of the fair. The arrangements were more complete than we have before witnessed, in any State. To each department was appropriated a building or tent, making in all eight, from 96 feet long by 25 wide, to 156 feet by 100. With the exception of farm and dairy products, and fine arts, and Fume manufactures, the buildings were well filled with every variety of article, in the highest degree creditable to the skill and industry of a great people.

Floral Hall, 165 feet by 120, was the most attractive feature of the exhibition. This was laid out in landscape form, beautifully graded, and newly turfed over, except the walks, and completely filled with rare plants from the neighboring green houses, with which Cincinnati, and its environs, so richly abound. At one end of the ground was a splendid display of artificial rock work, interspersed and filled with a great variety of trees and plants, native of such places. At the base of the rock work, was a splendid fountain with its twenty jets ascending its water to the upper air, which fell, in cooling spray, upon the grass and plants beneath. At the entrance of this department, was a tall arch way, supported by pillars wrought with the stems and heads of the various cereals, which were interspersed with the various implements and tools of agriculture and horticulture. Upon the top, thirty feet from the ground, was to be seen a wagon loaded down with the golden sheaves. Around this was piled in rich profusion, the various fruits of the garden and the field, indicative of the bountiful harvest just gathered in. The great fruit tent was scarcely less attracting, every inch of which was filled with Pomona's richest gifts.

The design and execution of the above as well as the whole arrangement of the grounds was under the direction of M. G. Kern, now of the St. Louis Nurseries, who is one of the best Landscape Gardeners in the country, and they are admitted by the thousands who visited them to be highly creditable to him, for the skill and good taste exercised in their execution.

The departments for farm implements and machines, Power Hall, &c., were all well stored with specimens of new and useful things, but want of space now forbids us from alluding to any of them in detail, but we may refer to them in our next number.

The fair, both as it regards the extent and variety of the exhibition, and the number of persons who visited it was successful and satisfactory in the highest degree. From 30,000 to 40,000 persons must have visited the grounds on each of the last three days of the fair, notwithstanding the intense heat and almost suffocating dust.

**FAIR OF THE ST. CLAIR CO. ILL. AGRICULTURAL AND MECHANICAL SOCIETY.**—The Fourth annual Fair of this Society was held at the city of Belleville on the 16th, 17th and 18th, of September. The fair grounds were purchased the past spring, and are contiguous to the city. They are nicely enclosed and contain suitable buildings, and a large ring for the trial of horses, and the exhibition of stock. Taking into consideration the recent purchase of the grounds, and the means of the Society, we think the officers have done nobly, and deserve great praise for their efficient services. They must feel highly gratified at the success of their Fourth Annual Exhibition.

It would give us pleasure to notice the exhibition in detail—but we have so many fairs to notice that we are compelled to be brief with all. We shall notice only such things as are worthy of particular mention. And under this head we must not fail to speak of the splendid Morgan stallion, "Addison," purchased in Burlington, Vermont, for the sum of \$5000, by the "Association for the improvement of the stock of horses in St. Clair county," of which society R. A. Moore is President, E. Abend, Secretary and S. B. Chandler, Treasurer. "Addison" is a coal black, well built, fast horse, with splendid style and action. He is a most excellent animal, and does credit to the judgment of those to whom the important trust of selecting a horse was referred. The exhibition of horses was large, but there were but few valuable horses on the ground.

The exhibition of cattle was not large, but there were some fine animals exhibited. Among these was an imported cow recently purchased by Mr. Conrad Bornman, of the Illinois Stock Importing Company, for the sum of \$975. Mr. Bornman also purchased of the same company an imported Berkshire sow, for which he paid \$350. Messrs. E. W. West, Samuel Winn, Wm. Ruthertford, J. R. Pierce, A. Piles and others also exhibited some fine specimens of Durham Cattle.

**FAIR PRODUCTS.**—The exhibition in this department was excellent. The specimens of the different varieties of wheat, barley, oats and corn were highly creditable to the farmers of St. Clair county. A new species of barley, recently from the Patent Office, called the Italian Spring barley, was on exhibition. It resembles wheat more than barley, when cleaned, only the kernels are by far larger than wheat. It will yield double the quantity per acre that wheat will, but we understand that the stem is not strong enough to support the large heads, and that it is inclined to lodge before coming to maturity.

Dr. E. Stark exhibited several varieties of corn, and among them one kind which he claims is particularly valuable, for eating in the green state. He calls it the White Flour Corn. In ten weeks from planting, it is in a suitable condition for eating. Dr. Stark also had on exhibition some syrup of the Chinese Sugar Cane which tastes pleasantly. We acknowledge the receipt of a bottle of the syrup from the Doctor, which we keep in our sanctum where our friends are permitted to take a sip.

**THE VEGETABLE DEPARTMENT** contained monster pumpkins, cabbages, beets, &c. A stalk of hemp was exhibited, nearly seven inches in circumference. Several stalks of Chinese Sugar Cane, fourteen and one half feet high were on the ground.

**FOWLS.**—There were quite a number of coops of fowls

on the ground, and among the number was one containing a pair of hybrid fowls—a cross between the Guinea and the common fowl. They are about one and a half years old, and thus far no eggs have been produced.—They are a queer specimen of the fowl species.

But the crowning glory of the fair was the splendid exhibition of the Ladies Department. In no county society have we seen it surpassed. The ladies contributed freely to the exhibition. Their department was literally overflowing with the works of their fair hands. They seem determined to do their share, in support of the society, and if the "lords of creation" of St. Clair county will do their part as well as the ladies will do theirs, the society will become—as we really think it is destined to—one of the most prosperous county societies in Illinois. To the officers of the society, and the citizens generally, we return our thanks for polite attentions shown us.

To Mr. S. B. Chandler, Treasurer and Corresponding Secretary of the Society, who, perhaps has done more for the society than any other one man, are we indebted for a rousing list of subscribers, obtained during the fair. Mr. Chandler is one of those active, energetic, whole souled men, who is bound to be successful in whatever he undertakes. "May his shadow never grow less." Mr. Anthony Schott, and indeed all of the officers of the society deserve great credit, for the admirable manner, in which they discharged their duties.

We enjoyed the hospitality of our friend W. H. McBride during our stay, who has a fine farm about four miles from Belleville.

**PREMIUM LIST OF THE UNITED STATES AGRICULTURAL SOCIETY.**—There were various causes which operated to produce a failure of the U. S. Agricultural Society at Louisville. From the great success of the previous exhibitions, hundreds of manufacturers well known all over the country, desired to exhibit specimens of their implements and machines, but were unable to procure copies of the premium list. In Albany, N. Y., and in numerous other cities, celebrated for the extensive manufacture of agricultural machinery, not one of whom, so far as we have been able to learn, received copies of the catalogue. The Valley Farmer has a circulation at least ten times greater than any similar paper in this part of the West, and we never saw a copy of the premium list, until we applied to one of the officers of the society, near the close of the fair, and it was then with difficulty we obtained one. Had these lists been circulated as widely as they should have been among the representatives of the press and otherwise, much wider publicity would have been given of the arrangements of the fair and a much larger representation secured.

Numerous letters were sent to us from all quarters of the country, requesting us to send copies. The fact is, by neglect, oversight and mismanagement, the exhibition was in no way creditable to Louisville or Kentucky. The receipts at the gates, though quite large from the high price charged for admission, are found to fall from three to five thousand dollars short of meeting the expenses, notwithstanding LORD NAPIER and the Hon. G. W. PARK CURTIS, and other distinguished dignitaries who did not appear were promised in the prints. The citizens of Louisville, who pledged themselves to the amount of \$30,000, in case of contingency, will now be

required to meet the deficiency—a circumstance that has never before occurred in the history of this society.

We are not disposed to charge any omission or neglect of duty to the OFFICERS PROPR., of the U. S. Agricultural Society. We believe they did all they were able or permitted to do to secure a good fair.

**Premiums awarded to the Best Mowing and Reaping Machines at the Grand Trial of the United States Agricultural Society at Syracuse, in July last.**

At the late fair of the United States Agricultural Society held at Louisville, the following premiums were announced. To Manny's Combined Mowing and Reaping Machine, with Wood's Improvement, First Premium—Grand Gold Medal of Honor. To the same, as Reaper, Second Premium—Bronze Medal. To McCormick's Reaper, First Premium—Gold Medal of Honor.

As the awards were made upon the most accurate mathematical calculations upon the amount of power expended in draft, and in overcoming the side draft, determined by a superior dynamometer, in connection with points of durability, efficiency in operation, &c., the committee have not yet declared the award on the best single mower. We will announce this as soon as made public.

**THE "HOWARD PREMIUM."**—In another part of this number will be found the correspondence of H. B. Howard, Louisville, Kentucky, and R. W. Scott, Secretary of the Kentucky State Agricultural Society, in which Mr. Howard, for the encouragement of an improved system of wheat culture, throughout the states of Kentucky and Indiana, offers to the farmers in each State who shall raise the best twenty-five acres of wheat to be sown the present fall as the "Howard Premium," Manny's Combined Mowing and Reaping Machine, to which was awarded the first Premium, of a Grand Gold Medal at the late trial of the United States Agricultural Society at Syracuse.

In the offer of this liberal premium of more than \$300 Mr. Howard will bestow a lasting benefit upon the farmers of the great West. Those who are familiar with the system of cultivating this crop in New York, (Mr. Howard's native State), are aware that the yield, considering the difference in the fertility of the soil, is twenty five or fifty per cent greater in the wheat growing sections of that State than under our western method of cultivation.

The premium is well worth an effort to obtain it, besides, by due preparation of the soil and proper selection of seed a largely increased crop may be obtained, doubly compensating for all the extra labor. We therefore hope that at least one thousand farmers in each State will declare their intention to become competitors for the prize, thus adding in the aggregate of the wheat crop in these two States, many thousands of bushels, and encouraging thousands of others in after years to imitate their example and thereby aid in the establishment of a general improvement in agriculture.

**SALES OF STOCK LAST COUNTY COURT DAY IN PARIS, KY.**—The sales of stock in Paris on the first Monday in last month were beyond an average for the season.

There were a large number of purchasers present and stock sold at good prices. The sales of the two leading auctioneers, Mr. Hibler and Mr. Sadler, amounted to \$62,798 69, while the private sales amounted to nearly as much more. Some of the lots of mules of two years old brought \$133 60 a head, while other lots went at lower rates.

**BRINLEY & DAVIS' PLOWS AND CULTIVATORS.**

We saw eight of these plows on exhibition at the late National fair at Louisville, upon which Mr. Brinley informed us that he paid EIGHTY DOLLARS entrance fee. Brinley's plows enjoy a world wide reputation, but ten dollars apiece for displaying them to an admiring multitude is "paying too dear for the whistle." Mr. Brinley's new cultivators possess some important advantages over any others now made.

**SORCHO AND IMPHEE.—THE NEW SUGAR CANE.**

—This is the title of a new work by Henry S. Olcott, upon the subject of the growth of the Chinese and African sugar Canes, and the manufacture of syrup and sugar therefrom; also their value as a forage crop, and for the manufacture of Alcohol, Wines, Beer, Cider, Vinegar, starch, &c. It is a work of 350 pages and affords all the information within reach, either in this country, or in Europe, upon the various subjects. It is published and for sale by A. O. Moore, late C. M. Saxton & Co., New York, and also for sale by A. Gunter, 99 Third street, Louisville, Ky., and J. M. Crawford, next door to the Valley Farmer office, St. Louis, Mo., to whom we refer the numerous persons who have applied to us for information on the subject.

**ACCIDENTS CAUSED BY THRESHING MACHINES.**

In our last number we gave an account of the death of a farmer, near Lexington, Ky., caused by the explosion of a threshing cylinder, while in operation. A correspondent of the Louisville Journal, writing from Hardin county, gives the names of three other individuals, who were seriously mutilated by a similar cause, all of which occurred within a few days of each other, and all in the same neighborhood. One man lost an arm, and the others, each a leg. It is seldom that accidents occur by the flying apart of a threshing cylinder, which do not prove even more disastrous than these. Death is more frequently the consequence. Persons using machines made in the reckless manner, of unseasoned materials, to which we before referred, should examine them frequently, and see that the shrinkage has not been unequal, causing the cylinder to become out of balance, or the bands to become loose. Nothing can be more dangerous to human life, than to run a machine improperly made of unseasoned timber, and we would advise all who have been imposed on, with such, to throw them away at once. Last season when a fatal accident occurred in running one of these machines but a few weeks from the hands of the manufacturer, so powerful was the rupture causing an explosion, with a noise like gunpowder, that the persons present, attributed it to some explosive material in the machine. A cylinder which is revolving with the velocity of near a thousand revolutions in a minute, the tendency of the parts to fly off by the centrifugal force, is very great and too much caution cannot be exercised in seeing that every part is secure.

## FRUIT TREES.

We publish the following, from a large number of similar letters that we have received, as we can, by replying to this publicly, answer them all.

Mr. N. J. COLMAN—Sir:—I wish this fall to set out about 200 fruit trees, of different varieties, and being very desirous of having none but the best fruit, I have taken the liberty to ask your assistance in selecting the trees. I have already delayed three years in setting out my trees, for fear of being treated, as some of my neighbors have been, who, after nursing and cultivating their trees, have been sadly disappointed by seeing them bearing worthless fruit, entirely different from what they were represented to be.

I want 125 apple, 50 peach, 25 cherry, 25 plumb and 25 pear trees, also 5 plants of the Lawton blackberry.—No doubt you are frequently addressed, by persons residing at a distance from the city, especially readers of your valuable journal, who expect you to attend to such matters as this, as a mere matter of accommodation. I do not expect you to do so for me. Having entire confidence in your judgment and knowledge of trees, if you will attend to the selecting of them for me, you will not only receive my sincere thanks, but I am willing to compensate you to whatever amount you may think right.

Please let me hear soon what aged trees are best to transplant, with price, and your commission attached, and I will immediately remit you the money. The varieties I will leave entirely with you to select, having more confidence in your judgment than in my own.

Yours Respectfully, CHAS. W. CAMPBELL.  
ROCK HOUSE PRAIRIE, Mo., Sept. 12th, 1857.

REMARKS.—We are always willing to do everything we can, for the accommodation of the readers of our journal. Heretofore we have been so constantly employed, in attending to our periodical, that, we regret to say, we have not always given that attention to correspondents which we should have been glad to have done. We have now, however, more assistance, and shall have ample time to render any reasonable favors to our readers. But whatever we can do, shall be done without fee or reward. We desire no compensation. Our readers, generally, have laid us under obligations to them for the kind manner in which they have labored in extending the circulation of our journal, until its list of subscribers ranks second to but one or two similar publications in the land. Any favor which we can render them, will be granted most cheerfully.

And especially will we take pleasure in rendering any aid in the selection or purchase of fruit trees, if they desire us to, when they cannot attend to it themselves. We have repeatedly urged the importance of paying more attention to the cultivation of fruit. If we could have our way, we would have a complete succession of fruit in every farmer's home in the country. Such a succession can be had at a little expense and labor. And it would add infinitely to the health and happiness of every family. We are glad to see that increased attention is being paid to the subject. Whatever we can do to contribute to the extension of fruit culture will be done with a willing heart.

In reply to our correspondent, we would state that we have been most successful in planting apple and plum trees, that are two or three years from the bud or graft, pear and cherry trees that are one or two years old from the bud or graft, and peach trees one year old from the bud. The peach should never be more than one year from the bud.

We believe the price of fruit trees is pretty well established here. Apple and peach trees, by the single tree selling at 25 cents each, and by the 100, \$20. Cher-

ries, plums and pears about 50 cents each—and the Lawton blackberry about 25 cents per plant.

## A Present of Fruit.

We received on the 12th ult., a box of the finest peaches we have ever seen. We believe there is no situation in our country, better adapted to bring out in full perfection the excellent qualities of the peach, or indeed any other fruit, than the high or rolling lands in Missouri. We give below the letter of our friend accompanying the fruit:

Mr. COLMAN:—As the peaches are now in full perfection, I would consider it a grievous injustice if I did not refresh you with a few of the choicest specimens, in your sanctum, where you are now, doubtless, laboring for our benefit. I send you a box, containing Morris' white rareripe, Crawford's Melocoton, yellow, with a red cheek, Yellow Rareripe, red and yellow, very downy; Columbia, yellow, striped red; Royal George, very large, greenish white, with red cheek; Brevoorts Morris, resembling it, but smaller; Mammoth Cling, white, mottled red; Late Cling, and Lemon Cling. Of pears and grapes I invite you to partake with me at the time of our fair, which, by the bye, will be on the 24th and 25th, instead of the 25th and 26th of September, when we expect to see you, and will take no denial. In return for this somewhat dictatorial manner, in which we invite you, we will engage to regale you with the very choicest fruits of all kinds, and the very best Catawba, until you cry, in mercy, hold! it is enough!

But, in good earnest, do come, and be assured of a hearty welcome. I should like to show you around in our orchards and vineyards, which will be then in their full glory.  
Yours truly, GEORGE HUSMAN.

HERMAN, Mo., Sept. 12th, 1857.

## Chinese Sugar Cane.

We have enquiries from various quarters for information on the subject of the manufacture of sugar, &c. from the Chinese Sugar Cane. In a former number of the Valley Farmer we gave all the facts within our reach and the experience of the present season thus far has added nothing to the general stock. Several small works were written last season on the subject. Henry S. Olcott of New York has recently written a work embracing all the information within his reach, gathered both in this and foreign countries. Mr. O. has just made a trip to the plantation of Gov. Hammond of South Carolina, where a large quantity of cane is to be submitted to experiment, but at the time of Mr. O.'s visit the cane was not sufficiently ripe to press. He returns again to South Carolina and by the time this number reaches our readers the work will be published with the result of the latest experiments. It is to be published by A. O. Moore, late C. M. Saxton & Co., 140, Fulton street, New York, price \$1.00 sent post paid by mail to any part of the United States. It will be better for our readers, who are interested in the matter to order the book, as it would be impossible for us to lay down in the small space of the Valley Farmer all the details necessary for successful experiments, even if we had the facts before us. The papers now are giving us the details of numerous small experiments in pressing and boiling down the juice, but nothing new or reliable. As fast as any established facts come to light, not calculated to lead the public astray, we shall publish them.

Hedges & Free, of Cincinnati, Ohio, are now manufacturing largely, mills and evaporating pans for use the present season. We have not their prices, but for the apparatus complete we think the price is two or three hundred dollars.

**FALL FAIRS.**—The seventh annual exhibition of the Union Agricultural and Mechanical Association will be opened at Eminence, Ky., on the 6th of October and will continue four days.

It is probable that other local fairs will be held in the State during the present month, but of the time and place of holding them we have not been informed.

We acknowledge our obligations to the officers of numerous State and County associations for "complimentary" tickets to attend their several fairs. We intend to employ all the time in this way, and would be glad to meet our friends in every section of the State and at the fairs in other States, but this is impossible, as several fairs take place on the same days. We shall make the most of what we see, and give our readers the benefit of every thing that may present itself in the form of improvement.

**BOURBON COUNTY (KY.) STOCK REGISTER—A GOOD IDEA.**—Paris, the seat of Bourbon county, Ky., is admitted to be the greatest stock market in the United States, and we do not know but we may say in the world. Hundreds of dealers in almost all kinds of farm stock resort to this place for the purchase and sale of stock. Besides the stock sold at private sale at no fixed periods, regular sales are held on County Court day, the 1st Monday in each month.

For the accommodation of strangers the stock breeders of Bourbon county have provided two copies of Registers of Stock of that county, which will be found one in the Paris Hotel and the other in the Bourbon House, in Paris. These Registers will furnish strangers all necessary information as to kinds of stock and where to be found.

Other locations claiming notoriety in this way, should furnish similar facilities for public convenience, as well as for the interest of stock breeders.

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**STATE FAIRS FOR 1857.**—The following State Agricultural Societies have designated the time for holding their exhibitions:

East Tennessee, at Knoxville.....	Oct. 20, 21, 22, 23.
New York, at Buffalo.....	October 6, 7, 8, 9.
Iowa, at Muscatine.....	Oct. 6, 7, 8, 9.
Kentucky, at Henderson.....	Oct. 12, 13, 14, 15.
Maryland, at Baltimore.....	Oct. 21, 22, 23, 24, 25.
Massachusetts, at Boston.....	Oct. 21, 22, 23, 24.
Virginia.....	Oct. 23, 29, 30, 31.
West Tennessee, at Jackson.....	Oct. 27, 28, 29, 30.
Indiana, at Indianapolis.....	Oct. 5, 6, 7, 8, 9, 10.
New Hampshire, at Concord.....	Oct. 7, 8, 9.
Connecticut, at Bridgeport.....	Oct. 13, 14, 15, 16.
North Carolina, at Raleigh.....	Oct. 20, 21, 22, 23.
Alabama, at Montgomery.....	Oct. 27, 28, 29, 30.
South Carolina, at Columbia.....	Nov. 10, 11, 12.

#### FAIRS IN MISSOURI.

N. W. Mo. District, at St. Joseph, Oct. 20, 21, 22, 23.	
Boone Co.....	Sept. 28, 29, 30, Oct. 1.
Franklin Co., at Union.....	Oct. 8, 9, 10.
Marion Co., at Palmyra.....	Oct. 14, 15, 16, 17.
Clay Co., at Liberty.....	Oct. 7, 8, 9, 10.
Knox Co.....	Oct. 20, 21, 22, 23.
South-eastern Dist., Cape Girardeau, Oct. 8, 9, 10.	
Central District, Booneville.....	Oct. 5, 6, 7, 8, 9.
Ralls Co.....	Oct. 8, 9, 10, 11.
Pike Co., Boling Green.....	Oct. 20, 21, 22, 23.
Bond Co.....	Oct. 7, 8.
Scotland Co.....	Oct. 1, 2, 3.
Lafayette Co., Mo., Lexington.....	Oct. 13, 14, 15, 16.
S. W. District, Springfield.....	Oct. 6, 7, 8, 9.
Clinton Co., Mo., Plattsburg.....	Oct. 13, 14, 15, 16.

#### COUNTY FAIRS IN ILLINOIS.

Brown Co. Ag. Soc., Mt. Sterling Oct. 7, 8.	
Sangamon, Springfield.....	Oct. 16, 17, 18.
Stevenson.....	Oct. 7, 8, 9.
Winnebago, Rockford.....	Oct. 13, 14, 15.
Pike, Pittsfield.....	Oct. 14, 15.
Campaign, Urbana.....	Oct. 6.
Edgar, Paris.....	Oct. 1, 2.
Washington Co., Ill.....	Oct. 16, 16.
Richland, Ill.....	Oct. 10, 11.
Randolph Co., Ill., Sparta.....	Oct. 7, 8.
McDonough, Ill.....	Oct. 14, 15, 16.
Gallatin Co., Ill., Equality.....	Oct. 6, 7, 8.

**50,000 CATAWBA GRAPE ROOTS FOR SALE.** Persons wishing to plant Vineyards will find it to their interest to apply. M. G. KERN, St. Louis Nurseries.

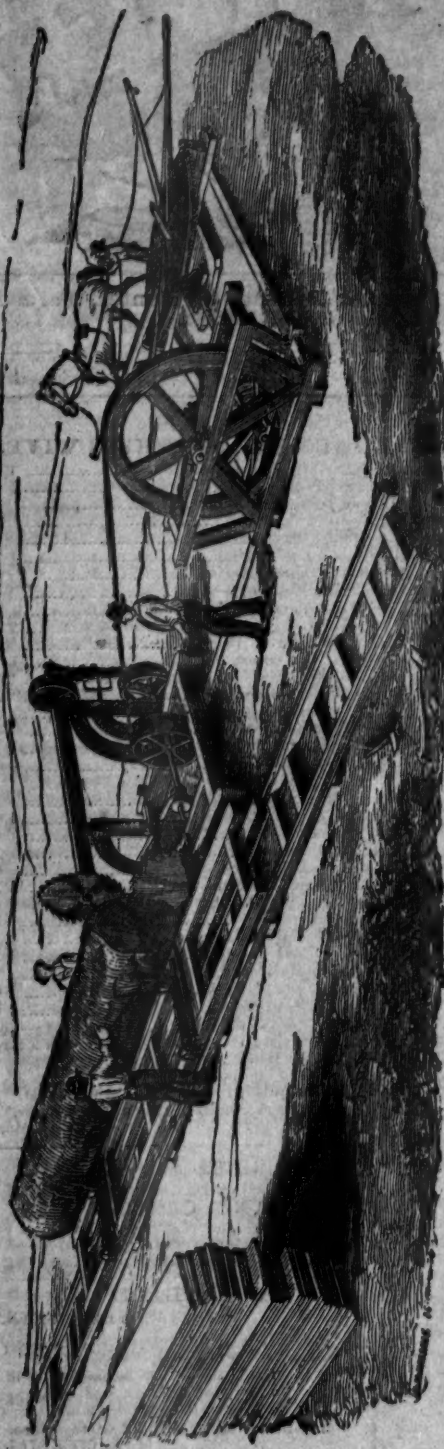
#### Hedge Fences!!

*Farmers delay not to plant your Hedges, and see that it is done right.*

The subscribers beg leave to say that their increased confidence in the Maclura, or Osage Orange, as the only hope of permanently fencing the prairies, has stimulated them to redouble their efforts in the culture of plants, and they now have the pleasure of offering from fifteen to twenty millions of the most thrifty and beautiful plants, on the most reasonable terms. Great inducements will be offered to planters and wholesale dealers. The plants will be taken up this Fall, and handled and packed with the greatest care, and delivered on the cars at Bloomington and Wenona, Ill., either in the fall or spring. A treatise on Hedge culture, detailing all the latest improvements, will soon be issued, and sent gratis to all who apply for it. Orders solicited, and good agents wanted, to whom we offer very liberal inducements.

Address **OVERMAN & MANS.**  
Bloomington, Ill., Oct. 1st, 1857.

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## WHITLEY'S PATENT PORTABLE DOUBLE CIRCULAR SAW MILL.

PATENTED MARCH 4, 1856.

MANUFACTURED BY CLARK, AVERY & VOORHIES.

AT THE PEOPLE'S IRON WORKS,

Main street, between Florida and Mulamphy streets, North of the Shot Tower, St. Louis, Mo.

The Simplicity, Cheapness, Durability, Strength and Easy Management of this Mill, makes it the best now in use. A glance at its combined improvements cannot fail to convince every person of the superiority over any other for making lumber. It is constructed with two Saws, one above the other, and in line with each other, so as to assist in cutting off the slab, swell, butts and knots, and splitting large logs. The top saw can be moved on the arcs, so as to cut two plants with one run of the carriage, and in cutting fenoing it will cut from two to eight boards with the two saws. The after end of the two saw shafts are connected by an arm, which acts as a guide for both shafts, and serves for their adjustment, so as to have complete control of the saws whilst running, and keeping them true with each other whilst cutting. It is capable of sawing 1000 feet per hour, and will work without sawing crooked, in all kinds of timber. We warrant the Mills to perform in every respect as represented.

One of these Mills can be seen in operation at the PEOPLE'S IRON WORKS, where the public are invited to examine for themselves, and any information respecting them will be cheerfully given on application to ISAAC L. GARRISON, President of the Home Mutual Insurance Company, corner of Main and Vine streets.

Horse Powers and Steam Engines furnished with the Mills at short notice and upon satisfactory terms.

St. Louis, Garrison, 1854.

CLARK, AVERY & VOORHIES.

